جامعة القاسرة كلية الطبع البيطري قسم الأدوي

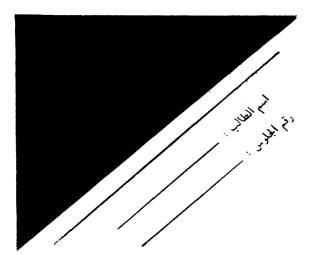
نماذج امتحان مقرر الأدوية (٣٠٣)

للفصل الدراسي الأول

أ • د/ محمد محمد ها شــم



كلية:



امتعان دور: سنة /

الصحح	الدرجة	الســؤال	
		الأول	المــادة:
		الثساني	الفسسرقة :
		الثالث	
		الرابسع	مجمسوع الدرجسات
-		الخامس	1
		السادس	
		السسايع ٠٠٠	
-		الشامن	
		التاسع	
		العاشر	**************************************
		مجموع الدرجات	

مجموع الدرجات (كتابة):

ملحسوظة : على الطالب أن يكتب أجابته على الوجهين وأن يجيب على الأسئلة المطلوبة فقط ولن يلتفت الى الاجابات الزائدة عن الطلوب .

(مركز جامعة القاهرة للطباعة والنشر)

Cairo University Faculty of Veterinary Medicine Department of Pharmacology General Pharmacology Examination Part 1

4/1/2003 Time: 2 hours Course: 303

1.11.11.11.11.11.11.11.11.11.11.11.11.1
) Classify antipyretic analgesics and give examples:
1
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2
2) Mention the mechanism of action of:
a- Dicoumarol as anticoagulant:
b- Hexamine as urinary antiseptic:
b- Hexamine as utiliary antisciple.
c- Physostigmine as parasympathomimetic:
3) Give reasons for the following:
a-The use of adrenaline with procaine:
b- The use of probencid with penicillins:
e- The use of atropine before volatile anaesthetics:



4) Classify Sympatholytics and give examples:
a
b
C
5) Mention 3 types of microsomal oxidation reactions:
a
b
c
Part 2
I) Put a mark (\checkmark) or (X) infront of each of the following sentences to express if it
is scientifically wright or wrong:
1- Prostaglandins are much more effective than oxytocin in inducing uterine contractions
n the earlier months of pregnancy().
2- Drugs which acidify urine such as ascorbic acid are contraindicated during
sulphonamide therapy ().
-Ammonium chloride induces gastric irritation which reflexly causes
expectoration().
- Bioavailability is the plocess by which drugs cross the lipid portion of the cell
nembrane().
- A lubricant is only help normal defection wahout increase in the intestinal motility
······································
-The organic phosphorus compounds are irreversible inhibitors of choline acetylase nzymes





5- Dextromethorphane:
6- Methyl dopa (aldomet):
7- Delmadinone acetate:
8- Salbutamol:
9- Mephenesin:
10- Senega:

III) Complete each of the following sentences with a name of one suitable drug: 1-..... is a chemical transmitter, synthesized from the amino acid phenylalanine and act mainly on α receptors. 2-..... is an emetic acting centrally by stimulation of the CTZ. 3-..... is a calcium channel blocker, used to control arrhythmia of atrial origin. 4-..... is an alkaloid acting by inhibition of the postsynaptic inhibitory transmitter; glycin. 5-..... is a non steroidal anti-inflammatory drug, effective against visceral pain in case of equine colic. 6-..... is a diuretic acting by competitive antagonism with aldosterone hormone. 7-..... act as a sedative hypnotic by activation of α_2 receptors in the brain leading to inhibitory effect. 8-..... is an anticoagulant synthesized in the body. It is effective both in vivo and in vitro. 9-..... is an alkaloid obtained from opium. It acts as smooth muscle relaxant without analgesic effect. 10-..... is an extract of Spanish fly acting as aphrodisiac. IV) Put the suitable words expressing the meaning of the following sentences: 1- The use of 2 drugs with opposite action, both drugs acting on the same receptor site(). 2- The main storage place of drugs in the body....(). 3- The potential of the drug to produce a particular effect at lower doses than those required to produce other effects...... 4- Compounds which precipitate proteins of the intestinal mucosa to form a protective barrier for the underlaying tissues.(5- The mechanism by which drugs can move through aqueous channels of the membrane depending on the concentration gradient..... (



6- The process i	in which drugs ar	e converted into	more water	soluble and	less toxic
derivatives to be	easily excreted from	m the body ().
7- Injection of a	solution of local a	naesthetic near a r	nain nerve tri	unk to anaest	hetize the
region supplied b	y this trunk	().
8- A group	of opium alk	aloids that in	clude morp	hine, code	ine and
heroin	• • • • • • • • • • • • • • • • • • • •	().
9- The action o	f acetylcholine or	n the tissues inne	ervated by th	ne central cl	nolinergic
nerves		().
10- The mixture of	of carbon dioxide a	nd oxygen is calle	d ().
V) Replace each	of the following st	tatements by a sci	ientific term:	:	
1- Drugs which st	imulate the liver ce	ells to secrete more	e bile ().
2- Drugs which a	are used to protect	the mucous men	nbrane of GI	Γ in cases of	ulcer or
inflammation		().
3- Substances whi	ich can be tak <mark>e</mark> n or	rally to attach othe	er materials to	their surface	e without
any chemical reac	tion	().
4- Drugs which	increase heart ra	ate and contracti	le power in	acute hear	t failure
		().
5- Drugs which in	crease excretion of	uric acid in the ur	rine ().
6- Drugs which sti	mulate contraction	of the uterus before	re full term ().
7- Agents which of	can expell the exce	ess gases from the	e stomach, ru	men and inte	estine by
relaxing the sphine	eters	().
8- Drugs which o	ean react with me	tallic ions in the	cell forming	inactive cor	npounds
	•••••	().
9- Drugs which sti	mulate bronchial g	glands to increase	and liquify br	onchial secre	tion and
help their expulsio	n by coughing	().
10- Tissue hormo	ones which are sy	nthesized in mos	st tissues in	the body fr	om free
arachidonic acid aı	nd act as oxytocics	().
VI) Underline the	only correct answ	ver:			
1- Is a bronchial di	lator used as sublir	ngual tablets:			
- Amyl nitrite	- Papaverine	- Aminophyll	line -	Nitroglycerin	ne

F

2- Equine colic due to gastric tympany can be treated by: - Nasogastric intubation - Papaverine - Trocarization of the upper flank - Caster oil 3- Stimulation of α adrenergic receptors induce: - Bronchial dilatation - Dilatation of eye pupil - Hypotension - Vomiting 4- All are purgatives acting by stimulation of the mechanoreceptors in the intestinal wall, except: - Methyl cellulose - Magnesium sulphate - Agar agar - Linseed oil 5- Carbachol is a drug usually used for treatment of: - Ruminal stasis - Bronchial asthma - Bradycardia - Diarrhea 6- All are cardiac tonics except: - Adrenaline - Digitoxin - Lanatocid A - Strophanthin 7- Is a derivative of ethacrynic acid acting as uricosuric diuretic: - Probencid - Indacrinone - Aspirin - Calomel 8- The simple diffusion of a drug through cell membrane needs: - High lipid solubility - Large molecular size - High pKa value - Ionization of the drug 9- Weak acids are excreted more in: - Alkaline urine - Acid urine - Milk - Expired air 10- Drugs which stimulate the depressed vital centers in the medulla: - Analeptics - Diaphoretics - Antipyretics - Analgesics 11- Drugs which decrease bacterial fermentation by killing or inhibiting rumen microflora. - Antibiotics - Antitussives - Anthelmintics - Antizymotics 12- Is a hypertensive drug acting by direct stimulation of smooth muscles of blood capillaries. - Noradrenaline - Adrenaline - Vasopressin - Ephedrine 13- One of the well known enzymes inducing drugs: - Phenobarbitone - Strychnine - Atropine - Codeine 14- They are naturally occurring Xanthine derivatives except: - Caffeine - Aminophylline - Theophylline - Theobromine 15- Is a skeletal muscle relaxant used commonly as pre-anaesthetic:

B

- Gallamine

- Adrenaline

- Atropine

- Papaverine

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امتحان دور: سنة

الصحح	الدرجة	الســؤال	
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		الشامن	6
		التاسيع	
		العاشر	
		مجموع الدرجات	

مجموع الدرجات (كتابة) :

ملحوظة : على الطالب أن يكتب أجابته على الوجهين وأن يجيب على الأسئلة المطلوبة فقط ولن يلتفت ألى الأجابات الزائدة عن المطلوب .

⁽ مركز جامعة القاهرة للطباعة والنشر)

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Cairo University Faculty of Veterinary Medicine Department of Pharmacology

4/1/2003 Time: 2 hours Course: 303

General Pharmacology Examination
Part 1

I) Replace each of the following statements by a scientific term:	
1- Drugs which increase excretion of uric acid in the urine ().
2- Drugs which are used to protect the mucous membrane of GIT in cases of ulcer	or
inflammation().
3- Drugs which stimulate bronchial glands to increase and liquify bronchial secretion a	.nd
help their expulsion by coughing().
4- Drugs which stimulate the liver cells to secrete more bile ().
5- Drugs which can react with metallic ions in the cell forming inactive compour	ıds
().
6- Drugs which stimulate contraction of the uterus before full term ().
7- Substances which can be taken orally to attach other materials to their surface with	out
any chemical reaction().
8- Agents which can expell the excess gases from the stomach, rumen and intestine	by
relaxing the sphincters().
9- Drugs which increase heart rate and contractile power in acute heart fail	ure
().
10- Tissue hormones which are synthesized in most tissues in the body from f	ree
arachidonic acid and act as oxytocics ().
II) Put a mark () or (X) infront of each of the following sentences to express i	if it





...... (



V) Underline the only correct answer:

- Probencid

1- Carbachol is a	drug usually used for tre	eatment of:	
- Bronchial asthn	na - Ruminal stasis	- Bradycardia	- Diarrhea
2- Equine colic d	ue to gastric tympany ca	n be treated by:	
- Caster oil - N	lasogastric intubation	- Papaverine - Trocari	zation of the upper flank
3- Drugs which d	lecrease bacterial fermen	tation by killing or inhi	biting rumen microflora.
- Antibiotics	- Antitussives	- Anthelmintics	- Antizymotics
4- Is a bronchial	dilator used as sublingua	l tablets:	
- Amyl nitrite	- Papaverine	- Aminophylline	- Nitroglycerine
5- Weak acids ar	e excreted more in:		
- Acid urine	- Alkaline urine	- Milk	- Expired air
6- All are cardiac	tonics except:		
- Adrenaline	- Digitoxin	- Lanatocid A	- Strophanthin
7- Stimulation of	α adrenergic receptors in	nduce:	
- Bronchial dilata	tion - Dilatation of	eye pupil - Hypot	tension - Vomiting
8- The simple dif	fusion of a drug through	cell membrane needs:	
- High lipid solu	bility - Large molecular	size - High pKa value	- lonization of the drug
9- All are purgati	ives acting by stimulation	n of the mechanorecept	ors in the intestinal wall,
except:			
- Agar agar	- Methyl cellulose	- Magnesium sulphate	e - Linseed oil
10- Is a hyperte	nsive drug acting by d	irect stimulation of sn	nooth muscles of blood
capilfaries.			
Noradrenaline	- Adrenaline	- Vasopressin	- Ephedrine
l I - They are natu	rally occurring Xanthine	derivatives except:	
· Caffeine	- Aminophylline	- Theophylline	- Theobromine
12- One of the we	ell known enzymes induc	ing drugs:	
Phenobarbitone	- Strychnine	- Atropine	- Codeine
13- Is a derivative	e of ethacrynic acid actin	g as uricosuric diuretic:	

IV A)

- Indacrinone

- Aspirin

- Calomel

14- Drugs which stir	nulate the depressed	vital centers in the medu	lla:	
- Analeptics	- Diaphoretics	- Antipyretics	- Analgesics	
15- Is a skeletal mus	cle relaxant used cor	nmonly as pre-anaestheti	c:	
- Papaverine	- Atropine	- Gallamine	- Adrenaline	
IV) Mention only o	ne main therapeutic	c use for each of the foll	owing drugs:	
1- Dextromethorphar	ne:		••••••	
2- Gitalin:			•••••	
3- Mephenesin:	· · · · · • · · · · · · · · · · · · · ·		•••••	
4- Pralidoxime:		•••••	•••••	
5- Salbutamol:			***************************************	
6- Methyl dopa (aldo	omet):		•••••	
7- Krameria:			•••••	
8- Delmadinone acet	ate:			
9- Sulphinpyrazone:.		•••••	•••••	
10- Senega:		···········	•••••	
]	Part 2		
1) Give reasons for	the following:			
a- The use of proben	cid with penicillins:			
********			***************************************	
b- The use of atropin	e before volatile anac	esthetics:		
	• • • • • • • • • • • • • • • • • • • •	•••••••••••••••••••••••••••••••••••••••		
c-The use of adrenali	ne with procaine:			
			•••••	

(A)

2) Classify Sympatholytics and give examples:
a
b
c
3) Mention 3 types of microsomal oxidation reactions:
a
b
c
4) Classify antipyretic analgesics and give examples:
a
b
c
5) Mention the mechanism of action of:
a- Hexamine as urinary antiseptie:
.,
b- Physostigmine as parasympathomimetic:
c- Dicoumarol as anticoagulant

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		الخامس	مجموع الدرجــات
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		الثامن	
		التاسع	
		العاشر	<u>L, , , , , , , , , , , , , , , , , , , </u>
		مجموعالدرجات	

ملحسوظة : على الطالب أن يكتب أجابته على الوجهين وأن يجيب على الاسئلة المطلسوبة فقط ولن يلتفت ألى الاجابات الزائدة عن المطلوب .

(مركز جامعة القاهرة للطباعة والنشير)

Cairo University Faculty of Veterinary Medicine Department of Pharmacology General Pharmacology Examination Part 1

4/1/2003 Time: 2 hours Course: 303

I) Complete each of the following sentences with a name of one suitable drug:
1 is an emetic acting centrally by stimulation of the CTZ.
2 is an alkaloid acting by inhibition of the
postsynaptic inhibitory transmitter; glycin.
3 is a non steroidal anti-inflammatory drug,
effective against visceral pain in case of equine colic.
4 act as a sedative hypnotic by activation of α_2
receptors in the brain leading to inhibitory effect.
5 is an alkaloid obtained from opium. It acts as
smooth muscle relaxant without analgesic effect.
6 is a calcium channel blocker, used to control
arrhythmia of atrial origin.
7 is an anticoagulant synthesized in the body. It
is effective both in vivo and in vitro.
8 is a diuretic acting by competitive antagonism
with aldosterone hormone.
9 is an extract of Spanish fly acting as aphrodisiac.
10 is a chemical transmitter, synthesized from the
amino acid phenylalanine and act mainly on α receptors.
II) Underline the only correct answer:
1- Equine colic due to gastric tympany can be treated by:
- Caster oil - Nasogastric intubation - Papaverine - Trocarization of the upper flank
2- The simple diffusion of a drug through cell membrane needs:
- High lipid solubility - Large molecular size - High pKa value - Ionization of the drug
3- Carbachol is a drug usually used for treatment of:
- Bronchial asthma - Ruminal stasis - Bradycardia - Diarrhea

4- All are purgati	ves acting by stimulation	n of the mechanoreceptor	s in the intestinal wall,	
except:				
		- Magnesium sulphate		
5- Drugs which d	ecrease bacterial fermen	tation by killing or inhibi	ting rumen microflora.	
- Antibiotics	- Antitussives	- Anthelmintics	- Antizymotics	
6- Stimulation of	α adrenergic receptors i	nduce:		
- Bronchial dilata	tion - Dilatation of	eye pupil - Hypote	nsion - Vomiting	
7- Weak acids are	e excreted more in:			
- Acid urine	- Alkaline urine	- Milk	- Expired air	
8- All are cardiac	tonics except:			
- Adrenaline	- Digitoxin	- Lanatocid A	- Strophanthin	
9- Is a hyperten	sive drug acting by d	irect stimulation of smo	ooth muscles of blood	
capillaries.				
- Noradrenaline	- Adrenaline	- Vasopressin	- Ephedrine	
10- Is a bronchial	dilator used as sublingu	al tablets:		
- Amyl nitrite	- Papaverine	- Aminophylline	- Nitroglycerine	
11- Is a derivative	e of ethacrynic acid actir	ng as uricosuric diuretic:		
- Probencid	- Indacrinone	- Aspirin	- Calomel	
12- They are natu	rally occurring Xanthine	e derivatives except:		
- Caffeine	- Aminophylline	- Theophylline	- Theobromine	
13- Drugs which stimulate the depressed vital centers in the medulla:				
- Analeptics	- Diaphoretics	- Antipyretics	- Analgesics	
14- Is a skeletal muscle relaxant used commonly as pre-anaesthetic:				
- Papaverine	- Atropine	- Gallamine	- Adrenaline	
15- One of the well known enzymes inducing drugs:				
- Phenobarbitone	- Strychnine	- Atropine	- Codeine	

III) Mention only one main therapeutic use for each of the following drugs:
1- Gitalin:
2- Sulphinpyrazone:
3- Dextromethorphane:
4- Delmadinone acetate:
5- Mephenesin:
6- Krameria:
7- Salbutamol:
8- Methyl dopa (aldomet):
9- Senega:
10- Pralidoxime:
IV) Put a mark (✓) or (X) infront of each of the following sentences to express i
it is scientifically wright or wrong:
-
1- Drugs which acidify urine such as ascorbic acid are contraindicated during sulphonamide therapy
2- Bioavailability is the process by which the process by the p
2- Bioavailability is the process by which drugs cross the lipid portion of the cell
membrane
3-The organic phosphorus compounds are irreversible inhibitors of choline acetylase
enzymes
4-Warfarin is an anticoagulant acting by competition with vitamin K
5- Drugs which delay gastric emptying usually decrease the rate of absorption of
concurrently administered drugs which are normally absorbed from the intestine
6.4
6-Ammonium chloride induces gastric irritation which reflexly causes
expectoration
7- If 2 drugs act at the same receptors, their log dose-response curves will have similar
slopes
8- Acetylcholine is a chemical transmitter released from the preganglionic sympathetic
nerves
9- Caster oil is an indirect irritant purgative, commonly used for dogs and cats().



10- Prostaglandins are much more effective than oxytocin in inducing	uterine
contractions in the earlier months of pregnancy().
11- Procaine is a local anaesthetic applied to the surface of skin or mucous mem	ıbranes
().
12- The alveolar concentration of a gas can be increased by gases that increases the	
alveolar ventilation ().
13- A lubricant is only help normal defecation without increase in the intestinal n	notility
().
14- Adrenaline produces its systemic actions following oral administration().
15- Atropine is contraindicated in all equine colics because of its potential to produ	ce
ileus ().
V) Put the suitable words expressing the meaning of the following sentences:	
1- The main storage place of drugs in the body().
2- Compounds which precipitate proteins of the intestinal mucosa to form a pro	tective
barrier for the underlaying tissues().
3- The mechanism by which drugs can move through aqueous channels of the mer	nbrane
depending on the concentration gradient).
4- Injection of a solution of local anaesthetic near a main nerve trunk to anaesthet	ize the
region supplied by this trunk().
5- The action of acetylcholine on the tissues innervated by the central chol	inergic
nerves().
6- The potential of the drug to produce a particular effect at lower doses than	those
required to produce other effects).
7- A group of opium alkaloids that include morphine, codeine	and
heroin().
8- The process in which drugs are converted into more water soluble and less	s toxic
derivatives to be easily excreted from the body().
9- The mixture of carbon dioxide and oxygen is called ().
10- The use of 2 drugs with opposite action, both drugs acting on the same recept	•
,).

VI) Replace each of the following statements by a scientific term:	
1- Drugs which are used to protect the mucous membrane of GIT in case	es of ulcer o
inflammation ()
2- Drugs which increase heart rate and contractile power in acute	heart failur
().
3- Drugs which increase excretion of uric acid in the urine ().
4- Agents which can expell the excess gases from the stomach, rumen and	d intestine by
relaxing the sphincters()
5- Drugs which stimulate bronchial glands to increase and liquify bronchial	secretion and
help their expulsion by coughing().
6- Substances which can be taken orally to attach other materials to their su	rfaçe withou
any chemical reaction()
7- Drugs which can react with metallic ions in the cell forming inactive	e compound
(
8- Drugs which stimulate contraction of the uterus before full term ().
9- Tissue hormones which are synthesized in most tissues in the boo	•
arachidonic acid and act as oxytocics ().
10- Drugs which stimulate the liver cells to secrete more bile ().
	,.
Part 2	
1) Mention the mechanism of action of:	
a- Physostigmine as parasympathomimetic:	
a- i nysosugnine as parasympanionimene.	
h. Digaumaral og antigaggulanti	• • • • • • • • • • • • • • • • • • • •
b- Dicoumarol as anticoagulant:	
	• • • • • • • • • • • • • • • • • • • •
c- Hexamine as urinary antiseptic:	



L) Class	ify antipyretic analgesics and give examples:
a	
b	
c	
3) Class	sify Sympatholytics and give examples:
b	
C-	
•	
4) Man	tion 3 types of microsomal oxidation reactions:
•	
b	
с	
	reasons for the following:
a- The t	use of atropine before volatile anaesthetics:
b-The u	se of adrenaline with procaine:
	use of probencid with penicillins:

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سئة /	 امتحان دور:
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الصحح	الدرجة	الســؤال	
		الأول ٠٠٠٠	
		الثساني ٠٠٠	القسم:
		الثالث	
		الرابسع •••	
		الخامس ٠٠٠	مجمسوع الدرجسات
		السادس ٠٠٠	
		السابع	
		الشامن	
·		التاسيع	
		العاشر	
		مجبوع الدرجات	

مجموع الدرجات (كتابة):

ملحسوظة : على الطالب ان يكتب اجابته على الوجهين وان يجيب على الاسئلة الطلوبة فقط ولن يلتفت الى الاجابات الزائدة عن الطلوب •

⁽ مركز جامعة القاهرة للطباعة والنشس)

Cairo University Faculty of Veterinary Medicine Department of Pharmacology
General Pharmacology Examination 4/1/2003 Time: 2 hours Course: 303

Part 1

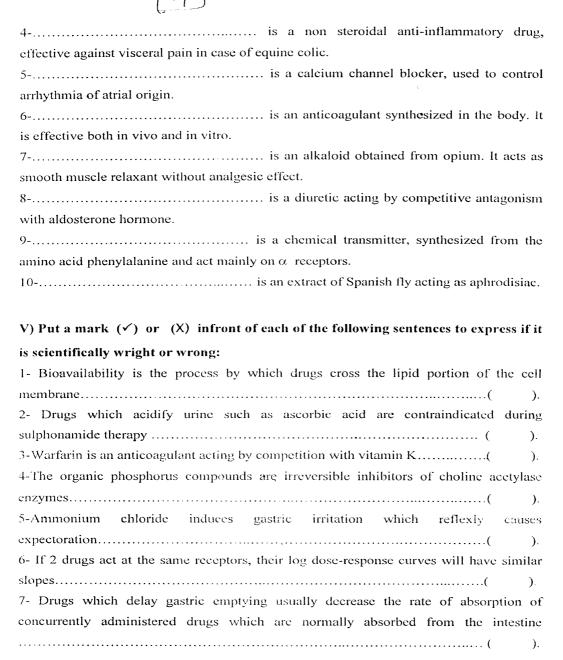
I) Put the suitable words expressing the meaning of the following sentences:	
1- Compounds which precipitate proteins of the intestinal mucosa to form a protein	ective
barrier for the underlaying tissues().
2- The main storage place of drugs in the body().
3- Injection of a solution of local anaesthetic near a main nerve trunk to anaesthetiz	ze the
region supplied by this trunk().
4- The mechanism by which drugs can move through aqueous channels of the mem	branc
depending on the concentration gradient ().
5- The potential of the drug to produce a particular effect at lower doses than	those
required to produce other effects ().
6- A group of opium alkaloids that include morphine, codeine	and
heroin().
7- The action of acetylcholine on the tissues innervated by the central cholin	ergic
nerves().
8- The process in which drugs are converted into more water soluble and less	toxic
derivatives to be easily excreted from the body().
9- The use of 2 drugs with opposite action, both drugs acting on the same recepto	r site
().
10-The mixture of carbon dioxide and oxygen is called ().
(I) Mention only one main therapeutic use for each of the following drugs:	
1- Sulphinpyrazone:	· • • • • • •
2- Gitalin:	
3- Delmadinone acetate:	
1- Senega:	.





3-..... act as a sedative hypnotic by activation of α_2

receptors in the brain leading to inhibitory effect.





8- Acetylcholine is a chemical transmitter released from the preganglionic sympathetic
nerves().
9- Prostaglandins are much more effective than oxytocin in inducing uterine contractions
in the earlier months of pregnancy().
10- Caster oil is an indirect irritant purgative, commonly used for dogs and cats().
11- Procaine is a local anaesthetic applied to the surface of skin or mucous membranes
().
12- Atropine is contraindicated in all equine colics because of its potential to produce
ileus
13- A lubricant is only help normal defecation without increase in the intestinal motility
().
14- The alveolar concentration of a gas can be increased by gases that increases the
alveolar ventilation
15- Adrenaline produces its systemic actions following oral administration().
VI) Underline the only correct answer:
1- All are purgatives acting by stimulation of the mechanoreceptors in the intestinal wall,
except:
- Agar agar - Methyl cellulose - Magnesium sulphate - Linseed oil
2- Equine colic due to gastric tympany can be treated by:
- Caster oil - Nasogastric intubation - Papaverine - Trocarization of the upper flank
3- The simple diffusion of a drug through cell membrane needs:
- High lipid solubility - Large molecular size - High pKa value - Ionization of the drug
4- Carbachol is a drug usually used for treatment of:
- Bronchial asthma - Ruminal stasis - Bradycardia - Diarrhea
5- Stimulation of α adrenergic receptors induce:
- Bronchial dilatation - Dilatation of eye pupil - Hypotension - Vomiting
6- Weak acids are excreted more in:
- Acid urine - Alkaline urine - Milk - Expired air
7- Drugs which decrease bacterial fermentation by killing or inhibiting rumen microflora.
- Antibiotics - Antitussives - Anthelmintics - Antizymotics

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8- All are cardiac to							
- Adrenaline	- Digitoxin	- Lanatocid A	- Strophanthin				
9- Is a bronchial dilator used as sublingual tablets:							
- Amyl nitrite	- Papaverine	- Aminophylline	- Nitroglycerine				
10- One of the well	known enzymes indu	cing drugs:					
- Phenobarbitone	- Strychnine	- Atropine	- Codeine				
11- Is a derivative	of ethacrynic acid actir	ng as uricosuric diuretic:					
- Probencid	- Indacrinone	- Aspirin	- Calomel				
12- Is a hypertens	sive drug acting by o	lirect stimulation of sm	ooth muscles of blood				
capillaries.							
- Noradrenaline	- Adrenaline	- Vasopressin	- Ephedrine				
13- Drugs which st	13- Drugs which stimulate the depressed vital centers in the medulla:						
- Analeptics	- Diaphoretics	- Antipyretics	- Analgesics				
14- They are natura	ally occurring Xanthin	e derivatives except:					
- Caffeine	- Aminophylline	- Theophylline	- Theobromine				
15- Is a skeletal mu	uscle relaxant used cor	nmonly as pre-anaesthet	ic:				
- Papaverine	- Atropine	- Gallamine	- Adrenaline				
		Part 2					
1) Classify Sympa	itholytics and give ex	amples:					
a							
b		,					
c							
2) Give reasons fo	or the following:						
a-The use of adrenaline with procaine:							

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b- The use of atropine before volatile anaesthetics:
c- The use of probencid with penicillins:
3) Mention the mechanism of action of:
a- Dicoumarol as anticoagulant:
b- Hexamine as urinary antiseptic:
c- Physostigmine as parasympathomimetic:
4) Classify antipyretic analgesics and give examples:
a
b
C
5) Mention 3 types of microsomal oxidation reactions:
a
b
C

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ملحوظة : على الطالب ان يكتب اجابته على الوجهين وان يجيب على الاسئلة المطلوبة فقط ولن يلتفت الى الاجابات الزائدة عن المطلوب •

(مركل جامعة القاهرة للطباعة والنشر)



Cairo University Faculty of Veterinary Medicine Department of Pharmacology General Pharmacology Examination

4/1/2003 Time: 2 hours Course: 303

Part 1

I) Put the suitable words expressing the meaning of the following senten-	ces:
1- Compounds which precipitate proteins of the intestinal mucosa to form	a protective
barrier for the underlaying tissues().
2- The main storage place of drugs in the body().
3- Injection of a solution of local anaesthetic near a main nerve trunk to ana	aesthetize the
region supplied by this trunk().
4- The mechanism by which drugs can move through aqueous channels of the	he membrane
depending on the concentration gradient ().
5- The potential of the drug to produce a particular effect at lower dose	es than those
required to produce other effects().
6- A group of opium alkaloids that include morphine, c	odeine and
heroin().
7- The action of acetylcholine on the tissues innervated by the central	l cholinergic
nerves().
8- The process in which drugs are converted into more water soluble a	nd less toxic
derivatives to be easily excreted from the body().
9- The use of 2 drugs with opposite action, both drugs acting on the same	receptor site
().
10-The mixture of carbon dioxide and oxygen is called ().
II) Mention only one main therapeutic use for each of the following drug	gs:
1- Sulphinpyrazone:	
2- Gitalin:	
3- Delmadinone acetate:	
4- Senega:	
5 Prolidovime:	



10- Tissue hormones which are synthesized in most tissues in the body from free

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help their expulsion by coughing(

8- Drugs which stimulate contraction of the uterus before full term (

9- Drugs which stimulate the liver cells to secrete more bile. (

arachidonic acid and act as oxytocics (

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8- Acetylcholine is a chemical transmitter released from the preganglionic sympa	thetic
nerves).
9- Prostaglandins are much more effective than oxytocin in inducing uterine contract	ctions
in the earlier months of pregnancy).
10- Caster oil is an indirect irritant purgative, commonly used for dogs and cats().
11- Procaine is a local anaesthetic applied to the surface of skin or mucous memb	ranes
().
12- Atropine is contraindicated in all equine colics because of its potential to produce	;
ileus ().
13- A lubricant is only help normal defecation without increase in the intestinal mo	tility
().
14- The alveolar concentration of a gas can be increased by gases that increases the	
alveolar ventilation ().
15- Adrenaline produces its systemic actions following oral administration().
VI) Underline the only correct answer:	
1- All are purgatives acting by stimulation of the mechanoreceptors in the intestinal v	11
except:	van,
- Agar agar - Methyl cellulose - Magnesium sulphate - Linseed oil	
2- Equine colic due to gastric tympany can be treated by:	
- Caster oil - Nasogastric intubation - Papaverine - Trocarization of the upper fl	ank
3- The simple diffusion of a drug through cell membrane needs:	ank
- High lipid solubility - Large molecular size - High pKa value - Ionization of the di	
4- Carbachol is a drug usually used for treatment of:	ug
- Bronchial asthma - Ruminal stasis - Bradycardia - Diarrhea	
5- Stimulation of α adrenergic receptors induce:	
- Bronchial dilatation - Dilatation of eye pupil - Hypotension - Vomiti	ng

7- Drugs which decrease bacterial fermentation by killing or inhibiting rumen microflora.

- Milk

- Anthelmintics

- Expired air

- Antizymotics

6- Weak acids are excreted more in:

- Alkaline urine

- Antitussives

- Acid urine

- Antibiotics

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8- All are cardiac	tonics except:		
- Adrenaline	- Digitoxin	- Lanatocid A	- Strophanthin
9- Is a bronchial of	dilator used as sublingua	l tablets:	
- Amyl nitrite	- Papaverine	- Aminophylline	- Nitroglycerine
10- One of the we	ell known enzymes indu	cing drugs:	
- Phenobarbitone	- Strychnine	- Atropine	- Codeine
11- Is a derivative	e of ethacrynic acid actin	g as uricosuric diuretic:	
- Probencid	- Indacrinone	- Aspirin	- Calomel
12- Is a hyperten	nsive drug acting by d	irect stimulation of sm	ooth muscles of blood
capillaries.			
- Noradrenaline	- Adrenaline	- Vasopressin	- Ephedrine
13- Drugs which	stimulate the depressed	vital centers in the medu	lla:
- Analeptics	- Diaphoretics	- Antipyretics	- Analgesics
14- They are natu	rally occurring Xanthine	derivatives except:	
- Caffeine	- Aminophylline	- Theophylline	- Theobromine
15- Is a skeletal m	uscle relaxant used com	monly as pre-anaestheti	c:
- Papaverine	- Atropine	- Gallamine	- Adrenaline
	<u>P</u>	Part 2	
1) Classify Symp	atholytics and give exa	mples:	
a		***************************************	• • • • • • • • • • • • • • • • • • • •
			• • • • • • • • • • • • • • • • • • • •
	• • • • • • • • • • • • • • • • • • • •		
2) Give reasons fe			
a-The use of adren	aline with procaine:		
• • • • • • • • • • • • • • • • • • • •	•••••	•••••	********
	•••••		

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b- The use of atropine before volatile anaesthetics:	
c- The use of probencid with penicillins:	
3) Mention the mechanism of action of:	
a- Dicoumarol as anticoagulant:	
b- Hexamine as urinary antiseptic:	
c- Physostigmine as parasympathomimetic:	•
	•
4) Classify antipyretic analgesics and give examples:	
a	
b	
c	
5) Mention 3 types of microsomal oxidation reactions:	
a	
b	
c	





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المسحح	الدرجة	الســؤال	
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		الثساني 200	الفــــر قة :
		الثالث	
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		العاشر	<u> </u>
		مجموع الدرجات	

مجموع الدرجات (كتابة): . .

ملحوظة : على الطالب ان يكتب اجابته على الوجهين وان يجيب على الاسئلة المطلوبة فقط ولن يلتفت الى الاجابات الزائدة عن المطلوب .

⁽ مركز جامعة القاهرة للطباعة والنشر)



Cairo University Faculty of Veterinary Medicine Department of Pharmacology General Pharmacology Examination Part 1

4/1/2003 Time: 2 hours Course: 303

I) Mention only on	e main therapeutic u	se for each of the foll	owing drugs:
1- Gitalin:		•••••	• • • • • • • • • • • • • • • • • • • •
2- Methyl dopa (alde	omet):		
3- Mephenesin:			••••••
4- Delmadinone ace	tate:	•••••	
5- Dextromethorpha	ne:		
6- Senega:		•••••	••••••
7- Pralidoxime:	•••••		•••••
8- Krameria:			
9- Sulphinpyrazone:	• • • • • • • • • • • • • • • • • • • •	••••••	
10- Salbutamol:		• • • • • • • • • • • • • • • • • • • •	•••••
II) Underline the or	nly correct answer:		
1- Is a sketetal muscl	le relaxant used comm	only as pre-anaesthetic	c:
- Papaverine	- Atropine	- Gallamine	- Adrenaline
2- Equine colic due t	o gastric tympany can	be treated by:	
- Caster oil - Naso	gastric intubation	- Papaverine - Trocari	zation of the upper flank
3- Drugs which stime	ulate the depressed vit	al centers in the medul	lla:
- Analeptics	- Diaphoretics	- Antipyretics	- Analgesics
4- The simple diffusi	on of a drug through c	ell membrane needs:	
- High lipid solubilit	y - Large molecular :	size - High pKa value	- Ionization of the drug
5- One of the well kn	own enzymes inducin	g drugs:	
- Phenobarbitone	- Strychnine	- Atropine	- Codeine
6- Is a derivative of e	thacrynic acid acting a	as uricosuric diuretic:	
- Probencid	- Indacrinone	- Aspirin	- Calomel
7- Carbachol is a drug	g usually used for trea	tment of:	
- Bronchial asthma	- Ruminal stasis	- Bradycardia	- Diarrhea

8- Stimulation of α adrenergic receptors induce:	
- Bronchial dilatation - Dilatation of eye pupil - Hypotension	- Vomiting
9- Is a hypertensive drug acting by direct stimulation of smooth m	uscles of blood
capillaries.	and of blood
- Noradrenaline - Adrenaline - Vasopressin	- Ephedrine
10- Weak acids are excreted more in:	Spiredime
- Acid urine - Alkaline urine - Milk - Expi	ired air
11- Drugs which decrease bacterial fermentation by killing or in	hibiting rumen
microflora.	
- Antibiotics - Antitussives - Anthelmintics - Ar	ntizymotics
12- All are purgatives acting by stimulation of the mechanoreceptors i	in the intestinal
wall, except:	ar the intestinal
- Agar agar - Methyl cellulose - Magnesium sulphate -	Linseed oil
13- All are cardiac tonics except:	
- Adrenaline - Digitoxin - Lanatocid A - Stro	phanthin
14- Is a bronchial dilator used as sublingual tablets:	1
- Amyl nitrite - Papaverine - Aminophylline - Nitros	glycerine
15- They are naturally occurring Xanthine derivatives except:	g-y
- Caffeine - Aminophylline - Theophylline - Theob	promine
III) Put the suitable words expressing the meaning of the following sen	tences:
1- The main storage place of drugs in the body()
2- The process in which drugs are converted into more water soluble	and less toxic
derivatives to be easily excreted from the body ()
3- The mechanism by which drugs can move through aqueous channels of	the membrane
depending on the concentration gradient).
4-The mixture of carbon dioxide and oxygen is called (,
5- Injection of a solution of local anaesthetic near a main nerve trunk to an	aesthetize the
region supplied by this trunk(,
6- The potential of the drug to produce a particular effect at lower dose	es than those
required to produce other effects).
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7- A group of opium alkaloids that include morphine, codeine and heroin
(
8- The action of acetylcholine on the tissues innervated by the central cholinergi
nerves(
9- Compounds which precipitate proteins of the intestinal mucosa to form a protective
barrier for the underlaying tissues(
10- The use of 2 drugs with opposite action, both drugs acting on the same receptor site
(
,
IV) Put a mark () or (X) infront of each of the following sentences to express in
it is scientifically wright or wrong:
1- Drugs, which acidify urine such as ascorbic acid, are contraindicated during
sulphonomide thereny
2. Adranalina medicaga ita gustamia antique full cuita de la lata de lata de la lata de lata delata de lata de lata delata de lata de lata de lata delata de lata delata delata delata delata
3- A lubricant is only help normal defecation without increase in the intestinal motility
4-Warfarin is an antigonaulant acting by commutating with the
5-The organic phosphorus compounds are irreversible inhibitors of choline acetylase
enzymes().
6- Caster oil is an indirect imitant managing
· · ·
7- Atropine is contraindicated in all equine colics because of its potential to produce ileus
R-Ammonium chlorido induses servis initialis a constituire de la c
8-Ammonium chloride induces gastric irritation which reflexly causes
expectoration().
9- If 2 drugs act at the same receptors, their log dose-response curves will have similar
Slopes
10- Drugs which delay gastric emptying usually decrease the rate of absorption of
concurrently administered drugs which are normally absorbed from the intestine
La Biognailability is the masses by all 1.1.
11- Bioavailability is the process by which drugs cross the lipid portion of the cell
membrane().

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12- Acetylcholine is a chemical transmitter released from the preganglionic syn	npathetic
nerves().
13- Procaine is a local anaesthetic applied to the surface of skin or mucous me	mbranes
().
14- Prostaglandins are much more effective than oxytocin in inducing	uterine
contractions in the earlier months of pregnancy().
15- The alveolar concentration of a gas can be increased by gases that increases the	ne
alveolar ventilation ().
V) Replace each of the following statements by a scientific term:	
1- Tissue hormones which are synthesized in most tissues in the body fr	om free
arachidonic acid and act as oxytocics ().
2- Agents which can expell the excess gases from the stomach, rumen and inte	estine by
relaxing the sphincters().
3- Substances which can be taken orally to attach other materials to their surface	without
any chemical reaction().
4- Drugs which can react with metallic ions in the cell forming inactive cor	npounds
().
5- Drugs which increase excretion of uric acid in the urine().
6- Drugs which stimulate bronchial glands to increase and liquify bronchial secre	tion and
help their expulsion by coughing().
7- Drugs which increase heart rate and contractile power in acute heart	failure
().
8- Drugs which are used to protect the mucous membrane of GIT in cases of	ulcer or
inflammation().
9- Drugs which stimulate contraction of the uterus before full term ().
10- Drugs which stimulate the liver cells to secrete more bile ().

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VI) Complete each of the following sentences with a name of one suitable drug:
1 is an extract of Spanish fly acting as aphrodisiac
2 act as a sedative hypnotic by activation of α
receptors in the brain leading to inhibitory effect.
3 is a non-steroidal anti-inflammatory drug, effective
against visceral pain in case of equine colic.
4 is an emetic acting centrally by stimulation of the CTZ
5 is an anticoagulant synthesized in the body. It is
effective both in vivo and in vitro.
6 is a calcium channel blocker, used to contro
arrhythmia of atrial origin.
7 is an alkaloid obtained from opium. It acts as smooth
muscle relaxant without analgesic effect.
8 is an alkaloid acting by inhibition of the postsynaptic
inhibitory transmitter; glycin.
9 s a diuretic acting by competitive antagonism
with aldosterone hormone.
10 is a chemical transmitter, synthesized from
the amino acid phenylalanine and act mainly on α receptors.
Part 2
1) Mention 3 types of microsomal oxidation reactions:
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Mention the mechanism of action of:
- Dicoumarol as anticoagulant:
- Dieoumaror as anticoaguiant.

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b- Hexamine as urinary antiseptic:
Discovery and the second secon
c- Physostigmine as parasympathomimetic:
3) Classify antipyretic analgesics and give examples:
a
b
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C
••••••
4) Classify Sympatholytics and give examples:
a
b
c
5) Give reasons for the following:
a-The use of adrenaline with procaine:
b- The use of atropine before volatile anaesthetics:
c- The use of probencid with penicillins:

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/ سنة	الدراسي:	العسام	إمتحان
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المصحح	الدرجة	الســؤال	المادة:
		الأول	الفرقة:القسم:
<u></u>		الثاني	
		الثالث	
		الرابع	
		الخامس	مجموع الدرجات
		السادس	
		السابع	·
		الثامن	
		التاسع	
		العاشـر	
		مجموع الدرجات	

مجموع الدرجات (كتابة):

ملحوظة: على الطالب أن يكتب إجابته على الوجهين وأن يجيب على الأسئلة المطلوبة فقط ولن يلتفت إلى الإجابات الزائدة عن المطلوب.

(مطبعة جامعة القاهرة)

Cairo University
Faculty of Veterinary Medicine
Department of Pharmacology

Date: 4-1-2003 Course: 303 Time: Two hours⁽¹⁾

General Pharmacology Examination For Undergraduate Students

I. Choose the correct answer and fill in the spaces with suitable words:

1. Some drugs can their effect on the ca. By osmosis b	en.			tive compounds and lo	ses
a. By osmosis	. By replacement	c. By physic	cai action	d. By chelation	
2. Autonomic drugs a. Parasympathomir	are classified acconetics b.Choliner	rding to the autor gic drugs c.Sym	nomic recepto	rs into: cs d.Adrenergic drugs	s
3. The action of this lead to increase of s a. GABA	s amino acid at spi pinal reflexes and t b. Glycine	nal interneuron i etanic contraction c. Glutamic	ns of skeletal:	by strychnine or bruci muscles: d. Aspartic acid	ine
peel and non-aromat	It was called bitte	agogues) is commers or stomachics	nonly used to and it may be	increase the appetite e aromatic such as lem	in on
a. Carbachol	b. Orange peel	c. Physost	igmine	d. Nux vomica	
coronary perfusion d	vagal stimulation uring the extended	and slowing the period of diastole	rate of cone.	gitalis in which the head duction, these improv	es
6. (reaches to the tissues	anoxia) which is This happens in c	due to weak circ ase of shock, afte	culation of bl or haemorrhag	lood and so less oxyge ge or in cardiac failure	en
excretion but cause k	ions retention e.	z.:	ormone so it	cause increase Na ⁺ ion	ns
a. Amphenone B	b. Furosemide	c. Spiror	nolactone	d. Acetazolamide	
8. (retained placenta and) is effective uterine prolapse.	drug in cases of	expulsion of	foetus in uterine inerti	a,
9. Displacement of a example, Warfarin to a. Steroid anti-inflam c. Hypoglycemic	xicity are attributed	to concurrently b. Flu	econd drug is administration unixin uscle relaxant		r
10. From the advantagea. Not suitable for insc. Rapid onset of drug	oluble substance	b. Local irritation	n may occur a then the anim	at the site of injection al is unconscious	

Die

II. Choose the correct answer and fill in the spaces with suitable words:

1. These drugs prevorgans and exocrine a. Parasympathomim c. Sympathomimetic	glands: etics	b. Parasympat	tholytics	of internal
c. Sympamommetic	S	d. Sympatholy	tics	
GABA-activated chlo	oride channel remain o	by increase GABA bit ppen (prolong the activity)	ty):	
a. Ivermectin	b. Valporate sodium	c. Picrotoxin	d. Barbit	urate
3. (the salivary and bron) is commonly chial secretions.	used as preanasthetic r	medication as it re	educes both
4. Is a sodium+ channa. Verapamil	nel blockers used to co b. Nefedipine	ntrol arrhythmia of ven c. Disopyramide	tricular origin e.g d. Bretyl	g. ium
mucous membrane so	stimulate reflexly the	.)They act by irritating bronchial glands to see c. Ipecacuanha	cret more secretic	ons such as:
inhibiting Na ⁺ reabso	diuretion and K [—] excretion b. Amilaride	es) act on distal tubi n and promote uric acid c. Bumetanide	d excretion e.g.	ing tubules
7. (clinically used to sync) play a 1 chronize ovulation.	role in ovulation, lute	olysis, uterine m	notility and
8. The ideal analgesi which act peripherally	c drugs for treatment	of equine colic are no	on-steroid anti-inf	flammatory
a. Phenylbutazone	b. Methadone	c. fenta	ınyl d.	Xylazine
9. This case occurs what a. Chemical antagonism. Competitive antago	sm	e with one another to fo b. Physiologica d. Noncompeti	orm an inactive co al antagonism tive antagonism	ompound.
10. Nicotinic action is a. Lobeline	blocked on the skeleta b. Suxamethonium	al muscle by: c. Small dose of acet	tylcholine d.	Gallamine
hyperacidity and impr	oves digestion:	nas a direct stimulant		_
12. (the GIT and produced a. Potassium citrates c. Magnesium carbona	their anti-acid only in	_	ine salts that rem eleasing CO ₂ such nesium trisilicate um citrates	nain within as:

Que?

III. Choose the correct answer and fill in the spaces with suitable words: 1. (.....), These group of drugs increase heart rate and contractile power in acute heart failure (arrest or shock) e.g. c. Strophanthus d. Squell b. Gitoxin a. Dobutamine 2. Drugs which liquefy bronchial vicid secretions by dissolving them, so reduce their viscosity to be easily expelled by coughing are called (.....) such as:

3. (.....) They act extra-renal on the myocardium acting as a cardiac stimulant and cause relaxation of smooth muscle of renal blood vessels leading to renal vasodilation and increase the glomerular filtrate with subsequent mild diuresis e.g. d. caffeine c. Triameterene a. Chlorothiazide b. Lasix

4. It act as counter irritants and during its excretion cause irritation and increase blood flow lead to sex organs so sexual activation (aphrodisiac) e.g.

a. Yohimbine

a. Bromhexine

b. Alcohols

c. Cantharidin

d. Strychnine

d. Senega

5. The best drug used for regression of the follicular cyst in cows is:

b. Camphor

a. PGF_{2α}

b. HCG

c. Oestradiol benzoate

d. F.S.H.

6. These cases occurs when an animal requires increasing doses to produce the same effect

a. Cross-tolerance

b. Selectivity

c. Tolerance

c. Guaiacol

d. Specificity

7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease:

a. Adrenaline

b. Atropine

c. Noradrenaline

d. Acetylcholine

8. This case occurs if a drug lacking an effect of its own increases the effect of a second, active drug(0+1>2).

a. Synergism

b. Potentiation

c. Antagonism

d. Additive drug effects

9. These are drugs considered a physiological mediator to acetylcholine, but are longer acting:

a. Muscarine

b. Carbachol

c. Mecholine

d. Pilocarpine

10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation:

a. Amphetamine

b. Nikethamide

c. Theophylline

d. Leptazol

11. (.....) Drugs in this group stimulate the dopaminergic receptors in the CTZ, which, in turn stimulates the vomiting center. The most commonly used emetic drug is: d. Apomorphine Hcl c. Zinc sulphate b. Copper sulphate

a. Morphine

12. It is the subject deals with absorption, distribution, biotransformation and excretion of

a. Pharmacodynamics

b. Therapeutics

c. Pharmacognosy

d. Pharmacokinetics



IV. Choose the correct answer and fill in the spaces with suitable words:

 This drug has selective act mainly used as purgative, diur 	ion on the smoo	th muscles of the GIT and tonic:	l urinary bladder; it is
a. Carbachol	b. Methacholine	c. Arecholine	d. Pilocarpine
2. This drug inhibits the transmitter on neuron and also	presynaptic and closes the chlor	ide channels of neuron:	
a. Picrotoxin	b. Barbiturates	c. Coramine	d. Cardiazol
3. This is a pathway (for diepithelial lining of the surface	of the body such	n as the cornea, gut and bla	dder
a. Aqueous diffusion b.Sim			d. Active transport
4. It is a powerful diaphoretic and in breaking down adhesic a. Physostigmine b. Piloc	n between iris ar	oedema and used also for a d eye lens by alternate use Arecholine	reatment of glaucoma it with atropine: d. Neostigmine
5. The main site of action of t	hese drugs is spin	nal cord where they block t	the action of inhibitory
transmitter Glycine at postsyr a. Amphetamine b. Bruc	ine c.	Ephedrine	d. Strychnine
6. (killing or inhibiting rumen ma. Turpentine oil b. Carb	icroflora, so it de	rugs which decrease bac crease the production of ga Methylsilicone	derial fermentation by as such as: d. Kerosene
7. From the importance of bita. Decrease absorption from tc. Delay the drug excretion	nding of drugs to the intestinal wal	plasma protein b. Increase diffusion of the diffusion of	the drug into the cell f the drug.
8. It is mainly used in treatment and used alternately with atro- a. Pilocarpine b. Pros	ent of myasthenia opine to break do stigmine	gravis, glaucoma to reduc wn adhesions between the c. Eserine	e intraoccular pressure iris and the eye lens: d. Bethanechol
9. Small dose from this drug general non-volatile anaesthe	act as nerve seda	tive and large doses acts as	s sedative hypnotic and
a. Potassium bromide	b. Chlorpromazi	ne c. Xylazine	d. Chloral hydrate
10. (irritations are produced. The a. Phenolphthalein	main members o b. Senna) are agents, which required f the group are the anthrac c. Castor oil	uire metabolism before ene purgatives as: d. Linseed oil
11. Acetylation reaction carr	ried mainly in the	e liver but also can be car	ried in the spleen, lung
and GIT for these drugs: a. Progesterone	b. Meperidine	c. Sulphonamides	d. Pentobarbital

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V. Choose the correct answer and fill in the spaces with suitable words:

1. It decreases the secretion administration of volatile anac	of all exocrine glan	ds and used as prear	nasthetic drug before
a. Adrenaline	b. Gallamine	c. Atropine	d. Hyoscine
2. They are widely used in vet of general anaesthesia for subinding of GABA to GABA-re	rgical operations. It	act as depressant eff	otic and for induction ect by increasing the
a. Bromides	b. Chloral hydrate	c. Barbiturates	d. Xylazine
3. (protective barrier for	the underlaying tissue	ipitates protein of the e such as: muth carbonate
4. Direct smooth muscle rel vessels and used as hypotensi	laxants, elevate c-GN	MP which relax smoo	oth muscles of blood
a. Clonidine	b. α-methyldopa	c. Amyl nitrite	d. Reserpine
5. Cats are deficient in spe-	cial enzyme which n	netabolize drugs like	paracetamol and the
salicylates such as a. Acyl transferase b. glucus	ronyl transferase c.	Pseudocholinestrase	d. Sulphotransferase
6. It has the same action of antispasmodic action to coun	of atropine but it pr	oduce less cerebral	stimulation and more
a. Hyoscyamine	b. Scopolamine	c. Hyoscine	d. Eucatropine
7. They are widely used in anaesthesia, and transport, ha	horses and cattle as	imals:	
a. Meprobamate	b. Xylazine	e. Chloral hydrate	d. Acepromazine
8. This rate is measured by trenal tubule.			
a. Tubular reabsorption b.T	ubular secretion c.R	enal excretion d.Glo	merular filtration
9. This drug is used to treat relaxes bronchial smooth mu a. Isoproterenol	bronchial asthma, se scle with little accom b. Epinephrine	lectively, activates β ₂ panying undesirable control of the cont	ardiac stimulation:
10. Injection of this drug	s.c. in dog cause	restlessness, panting,	salivation, vomiting,
defecation, decrease in body a. Apomorphin	b. Nalorphine	c. Morphine	d. Acetyl morphine
11. (bile and are used to help dige) are drugs whi	chronic liver diseases	such as:
a. Magnesium sulphate	b. Cincophen	c. Cholecystokinin	d. Sodium sulphate

VI. Choose the c	orrect answer and	ill in the	e spaces with suita	ble words:
producinom and ra	ctor vii but (by () is used in blood tr) for the formation of ransfusion and treatment
of thrombosis and b	olood sampling.			
me CNS causing n	either addiction nor na te b. Dihydrocodein	ircosis, u	cause antitussive ef used for treatment of c. Pholcodeine	Tect without depressing dry cough such as: d. Dextromethophan
aiso act as a tubulai	blocking agent for pe	nicillin e	.g.	acid in the urine, and it
a. Sulphinpyrazone	b. Probencie	i	c. Indacrinone	d. Allopurinol
4. It used to stimula and stimulate the sy	nte addition of follicle nthesis of androgen e.	growth,	stimulate supperovul	ation, embryo transfere
a. L.H.	b. F.S.H.	_	c. Oestrogen	d. Prostaglandins
5. () is the best dr	ug used f	or treatment of myast	thenia gravis in dogs.
6. When pKa of a dr	ug equal the pH the ra	te of its i	onization reach:	
a. 15%	b. 50%		c. 75%	d. 100%
increases mental and	nolamine, rapidly abso I physical activities an	orbed fro	m the GIT and powerse fatigue:	erful CNS stimulant, it
a. Ephedrine	b. Mephenteramine		c. Amphetamine	d. Metaraminol
8. It has antipyretic sensitization to pain	and analgesic effect treceptors and not caus	by inhibi se pentic	tion of heat regulatin	ng center and decrease
a. Paracetamol	b. Phenazone	c. Sodi	ium salicylates	d. Ibuprofen
9. It is alkaloid, proanaesthetic and aphro	oduces a competitive odisiac action:	∝ ₂ -adr	energie block, antidi	iuretic action, marked
a. Tolazoline		c. Azap	petine	d. Regitine
10 These drugs inhib	it cyclooxygenase and olatelet aggregation e.	thus inh	ibit the synthesis of the	hromoxane, which is a
a. Acetyl salicylic ac	id b. Warfarin s	odium	c. Heparin	d. Vitamin K
tract infection such a	s in pylonepheritis, cys	nce in acstitis and	cid urine are used fo urithritis e.g.	r treatment of urinary
a. Formalin	b. Sodium citrate		c. Ammonium chlori	de d. Hexamine
peripheral tissues:	synthesis of Norepine uses the concentration	phrine the	nrough inhibition of tomine and Norepinep	he decarboxylation of hrine in the CNS and
a. Reserpine	b. Bretylium	c. Guan	ethidine	d. Aldomet
13. Its solution is not and epidural anaesthe a. Amethocaine	absorbed from muco sia and usually combin b. Cinchocaine	us memb ned with c. Proca	adrenaline to prolong	g its duration of action
			-	d. Paintocain

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VII. Mention only the mechanism of action of the following drugs:

		Mechanism of action
10.	Drugs	
	Oximes as antidote for Organophosphorus toxicity	
2	Adrenaline as a bronchial dilator	
3	Pronethalol as Hypotensive drug	
4	Theophylline as A diuretic	
5	Metoclopramide as Anti-emetics	
6	Verapamil as Antiarrhythmic	
7	Dicoumarol as Anticoagulant	
8	Thiazides as Diuretics	
9	Papaverine during Asthmatic attack	
1	O Isoxurpine as Uterine sedatives	
-	11 Tannic acid as intestinal astringents for	
	treatment of diarrhoea	

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المحح	الدرجة	السسؤال	
		الأول	!!
		الثساني	الفــــ قة:القسم:
-		الثالث	
		آلرابسع	
-		المخامس	مجمسوع الدرچسات
		السابس	
		السسابع	
		الشامن	
		التاسسع	
- 1001		العساشر ٠٠٠	
		مجموع الدرجات	

مجموع الدرجات (كتابة): ...

ملحسوظة : على الطالب ان يكتب اجابته على الوجهين وان يجيب على الأسئلة المطلوبة فقط ولن يلتفت الى الاجابات الزائعة عن المطلوب .

⁽ مركز جاممة القاهرة للطباعة والنشر)

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Cairo University
Faculty of Veterinary Medicine
Department of Pharmacology

Date: 4-1-2003 Course: 303 Time: Two hours⁽²⁾

General Pharmacology Examination For Undergraduate Students

	rhiacology Examina	istisoble words:	
I. Choose the correct ar	nswer and fill in the space	choline to the cholinergic	receptors of internal
1 These drugs preven	nt the access of access	chomie to the chomergie	. Coopies
organs and exocrine gl	ands:	b. Parasympatholytic	
a. Parasympathomime	tics		•
c. Sympathomimetics		d. Sympatholytics	
- m 1	e GABA-like effects b	y increase GABA binding t	o its receptors lead to
CARA activated chlor	ide channel remain ope	il (bloiding the activity).	
a. Ivermectin	b. Valporate sodium	C. Tierotoxiii	d. Barbiturate
) is commonly us	ed as preanasthetic medicat	tion as it reduces both
the salivary and bronc	chial secretions.	ou us promission	
_		trol arrhythmia of ventricula	r origin e.g.
a. Verapamil	b. Nefedipine	c. Disopyraninge	a . 2009
	\ T	have not by irritating the set	sory nerves of gastric
mambrane so	stimulate reflexly the l b. Tr. Benzoin	hey act by irritating the ser oronchial glands to secret m c. Ipecacuanha d. An	ore secretions such as:
			tubulae and collecting
6. (diuretics) act on distal	aid everation a a
tubules inhibiting Na	reabsorption and K	xciellon and promote are a	014 0110 0110
a. Furosemide	b. Amilaride	c. Bumetanide	d. Ethacrynic acid
a. I alobotition			
7. (and clinically used to) pla synchronize ovulation	ay a role in ovulation, lute	olysis, uterine motility
			i anti inflammatoru
8 The ideal analges	ic drugs for treatment	of equine colic are non-ste	eroid anti-initallillatory
which act peripheral	ly such as:		
a. Phenylbutazone	b. Methadone	c. fentanyl	d. Xylazine
O. This case occurs V	when two drugs combine	e with one another to form a	in inactive compound.
a. Chemical antagon	ism	D. Filysiological an	lagoman
c. Competitive antag	nniem	d. Noncompetitive	antagonism
c. Competitive antag	301113111		
AG ATTENDED CARRON	is blocked on the skele	tal muscle by:	
a. Lobeline	b. Suxamethonium	c. Small dose of accepted	
	t ranalamal atimulante	has a direct stimulant to	myocardium, producing
11. It is a powerfu	ll cerebral stillulants,	nus u unest still	,
hyperacidity and im	proves digestion:	c. Theobromine	d. Amphetamine
a. Caffeine	b. Theophylline	c. Theodronnie	•
		anti-acids) are insoluble a I only in the stomach withou cate c. Magnesium carbona	

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II. Choose the correct answer and fill in the spaces with suitable words:

their effect on the	cell.	ions in the cell forming inact	ive compounds and loses
a. By osmosis	b. By replacement	c. By physical action	d. By chelation
2. Autonomic drug a. Parasympathom	gs are classified accordinates b.Cholinerg	ding to the autonomic receptoric drugs c.Sympathomimetic	rs into: es d.Adrenergic drugs
3. The action of the lead to increase of a. GABA	his amino acid at spin spinal reflexes and te b. Glycine	nal interneuron is antagonized tanic contractions of skeletal i c. Glutamic acid	by strychnine or brucine nuscles: d. Aspartic acid
debilitating anima peel and non-arom	ls. It was called bitter atic such as:	ogues) is commonly used to is or stomachics and it may be	increase the appetite in aromatic such as lemon
a. Carbachol	b. Orange peel	c. Physostigmine	d. Nux vomica
rate is slowed by coronary perfusion	vagal stimulation a during the extended p		duction, these improves
6. (reaches to the tissu	anoxia) which is les. This happens in ca	s due to weak circulation of b see of shock, after haemorrhag	lood and so less oxygen e or in cardiac failure
excretion but cause	etitive antagonism wi K ions retention e.g	th aldosterone hormone so it	cause increase Na ⁺ ions
	b. Furosemide	c. Spironolactone	d. Acetazolamide
3. (nertia, retained pla) is effect acenta and uterine prol	ive drug in cases of expulsi lapse.	on of foetus in uterine
D. Displacement of example, Warfarin a. Steroid anti-infla c. Hypoglycemic	toxicity are attributed	ing sites by a second drug is to concurrently administration b. Flunixin d. Muscle relaxants	n with:
. Not suitable for i	tages of parenteral addinsoluble substance rug action	ministration: b. Local irritation may occur a d. Can be used when the anim	at the site of injection al is unconscious



III. Choose the co	orrect answer and l	fill in the spaces with	suitable words
1. () These group of	drugs increase heart rate and
contractife power if	i acute heart failure (a	rrest or shock) e.g.	
a. Dobutamine	b. Gitoxin	c. Strophanth	1
2. Drugs which liqu	efy bronchial vicid se	ecretions by dissolving t	hem, so reduce their viscosity
a. Bromhexine	a by cougning are call	ea () such as:
a. Diolinexine	b. Camphor	c. Guaiacol	d. Senega
3. () They act extra-rei	nal on the myocardium acting
as a cardiac stimula	nt and cause relaxation	on of smooth muscle of	renal blood vessels leading to
a. Chlorothiazide	b. Lasix	rular filtrate with subseq	
		c. Triametere	
4. It act as counter lead to sex organs so	irritants and during in sexual activation (ap	ts excretion cause irrita phrodisiac) e.g.	tion and increase blood flow
a. Yohimbine	b. Alcohols	c. Cantharidin	d. Strychnine
5. The best drug used	d for regression of the	follicular cyst in cows i	S:
a. $PGF_{2\alpha}$	b. HCG	c. Oestradiol benzoat	
6 These cases assur	o suban an animat na m		
a. Cross-tolerance	s when an animal requ	ures increasing doses to c. Tolerance	produce the same effect
u. Cross-toterance	b. Selectivity	c. I olerance	d. Specificity
7. It is unsuitable a vascular disease:	is therapeutic agent,	but is sometimes used	for treatment of peripheral
a. Adrenaline	b. Atropine	c. Noradrenali	ne d. Acetylcholine
8. This case occurs if drug $(0 + 1 > 2)$.	f a drug lacking an eff	ect of its own increases	the effect of a second, active
a. Synergism	b. Potentiation	c. Antagonism	d. Additive drug effects
9. These are drugs co	nsidered a physiologic	cal mediator to acetylche	oline, but are longer acting:
a. Muscarine	b. Carbachol	c. Mecholine	d. Pilocarpine
10. These are drugs,	which stimulate the d	lepressed vital centers in	n medulla as respiratory and
vasomotor centers an	d improve respiration	and circulation:	to respiratory and
a. Amphetamine	b. Nikethamide	c. Theophylline	d. Leptazol
11. () Drugs in this	s group stimulate the do	paminergic receptors in the
LIZ, which, in turn s	timulates the vomiting	g center. The most comm	nonly used emetic drug is:
a. Morphine	b. Copper sulphate	c. Zinc sulphat	e d. Apomorphine Hel
2. It is the subject	deals with absorption	n, distribution, biotrans	formation and excretion of
lrugs i. Pharmacodynamics			
i. i naimacouynamics	b. Therapeution	cs c. Pharmacogno	osy d. Pharmacokinetics

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IV. Choose the correct answer and fill in the spaces with suitable words:

	1. This drug has seld mainly used as purga		smooth muscles of the G ninal tonic:	IT and urmary bladder	r; it is
	a. Carbachol	b. Methache	oline c. Arecholine	d. Pilocarpine	
	2. This drug inhib transmitter on neuron	its the presynaptic n and also closes the	and postsynaptic inhib	oition produced by Con:	BABA
	a. Picrotoxin	b. Barbitura	tes c. Coramine	d. Cardiazol	
	epithelial lining of th	e surface of the body	t) of limited capacity as such as the cornea, gut and c. Facilitated diffusion	nd bladder	_
	and in breaking down	n adhesion between i	nove oedema and used als ris and eye lens by alterna	ite use it with atropine:	
	a. Physostigmine	b. Pilocarpine	c. Arecholine	d. Neostigmine	;
	5. The main site of actransmitter Glycine a		s spinal cord where they to:	block the action of inhil	bitory
	a. Amphetamine	b. Brucine	c. Ephedrine	d. Strychnine	
Mad.			re drugs which decrease it decrease the production		on by
	a. Turpentine oil	b. Carbachol	c. Methylsilicone	d. Kerosene	
	7. From the importan a. Decrease absorption c. Delay the drug exc	on from the intestinal	s to plasma protein wall b. Increase diffusio d. Increase the toxi	on of the drug into the c	cell
			enia gravis, glaucoma to c down adhesions betwee c. Eserine		ns:
	general non-volatile a	anaesthetic (i.v. injec	sedative and large doses a tion) in horse and donkey	s:	
	a. Potassium bromide	b. Chlorpror	mazine c. Xylazine	d. Chloral hydra	ate
) are agents, which rs of the group are the an c. Castor oil		
	11. Acetylation react and GIT for these dru	ion carried mainly ir	the liver but also can be	e carried in the spleen,	lung
	a. Progesterone	b. Meperidir	ne c. Sulphonamic	ies d. Pentobar	rbital
			4		

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V. Choose the correct answer and fill in the spaces with suitable words:

1. It decreases the secret administration of volatile a. Adrenaline	anaestnesia:		
a. Aurenanne	b. Gallamine	c. Atropine	d. Hyoscine
2. They are widely used in of general anaesthesia fo binding of GABA to GAB. a. Bromides	r surgical operations	It act as depressant e aptic membrane:	pnotic and for induction offect by increasing the d. Xylazine
3 /			_
3. (of the intestinal mucosa to a. Aluminum salts b. C.	provide a protective ba alcium carbonate	arrier for the underlayi	nich precipitates protein ng tissue such as: ismuth carbonate
4. Direct smooth muscle vessels and used as hypoten	relaxants, elevate c-Cnsive drugs such as:	GMP which relax smo	ooth muscles of blood
a. Clonidine	b. α-methyldopa	c. Amyl nitrite	d. Reserpine
5. Cats are deficient in s salicylates such as		metabolize drugs like	e paracetamol and the
a. Acyl transferase b. gluc	curonyl transferase c	. Pseudocholinestrase	d. Sulphotransferase
6. It has the same action antispasmodic action to cou	of atropine but it punteract gripping:	produce less cerebral	stimulation and more
a. Hyoscyamine	b. Scopolamine	c. Hyoscine	d. Eucatropine
7. They are widely used anaesthesia, and transport, l	n horses and cattle a	s preanasthetic drug	for rapid induction of
	b. Xylazine	c. Chloral hydrate	d. Acepromazine
8. This rate is measured by renal tubule.			
a. Tubular reabsorption b.	Tubular secretion c.R	enal excretion d.Glo	merular filtration
D. This drug is used to trea elaxes bronchial smooth me i. Isoproterenol	uscle with little accomp	lectively, activates β ₂ - panying undesirable ca c. Norepinephrine	rdiac stimulation
0. Injection of this drug lefecation, decrease in body	temperature and then	deep narcoses:	salivation, vomiting,
. Apomorphin	b. Nalorphine	c. Morphine	d. Acetyl morphine
(nore bile and are used to he Magnesium sulphate	ip digestion of fat in ca	which stimulate the use of chronic liver disc c. Cholecystokinin	eases such as:

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VI. Choose the co	rrect answer and fi	ll in the space	s with suitabl	le words:
1. Internal haemorr	hage can be treated betor VII but (y () for the formation of asfusion and treatment
the CNS causing ne	either addiction nor nar te b. Dihydrocodeino	cosis, used for	antitussive effort treatment of dr elcodeine	ect without depressing y cough such as: d. Dextromethophan
3. It is a derivative also act as a tubular	of benzoic acid, which blocking agent for pen	h increase excre	ction of uric ac	eid in the urine, and it
a. Sulphinpyrazone	b. Probencid	_	acrinone	d. Allopurinol
4. It used to stimula and stimulate the syr	te addition of follicle ; nthesis of androgen e.g	growth, stimula	te supperovulat	tion, embryo transfere
a. L.H.	b. F.S.H.		trogen	d. Prostaglandins
5. () is the best d	rug used for trea	itment of myas	thenia gravis in dogs.
6. When pKa of a dr a. 15%	ug equal the pH the rat b. 50%	e of its ionizatio c. 75%		d. 100%
7. It is a non catech	nolamine, rapidly abso I physical activities and	rbed from the (GIT and power	ful CNS stimulant, it
a. Ephedrine	b. Mephenteramine		phetamine	d. Metaraminol
8. It has antipyretic	and analgesic effect breceptors and not caus	y inhibition of	heat regulating	g center and decrease
a. Paracetamol		c. Sodium sali	cylates	d. Ibuprofen
9. It is alkaloid, promaesthetic and aphro	oduces a competitive odisiac action:	∞_2 -adrenergic	block, antidiu	aretic action, marked
a. Tolazoline	b. Yohimbine	c. Azapetine		d. Regitine
O These drugs inhib	it cyclooxygenase and platelet aggregation e.g	thus inhibit the	synthesis of th	romoxane, which is a
. Acetyl salicylic ac	id b. Warfarin so	odium c. He _l	oarin	d. Vitamin K
1. Drugs that releas	se an antiseptic substa s in pylonepheritis, cys	nce in acid urir	ne are used for	treatment of urinary
. Formalin	b. Sodium citrate		nonium chlorid	le d. Hexamine
2. It depletes tissue lopa and also decrea eripheral tissues:	synthesis of Norepine ases the concentration	phrine through of dopamine a	inhibition of th nd Norepineph	ne decarboxylation of arine in the CNS and
Reserpine	b. Bretylium	c. Guanethidin	e	d. Aldomet
3. Its solution is not not epidural anaesthe . Amethocaine	t absorbed from muco sia and usually combin b. Cinchocaine	us membrane an ned with adrena c. Procaine	line to prolong	itable for infiltration its duration of action d. Paintocain





VII. Mention only the mechanism of action of the following drugs:

No	. Drugs	Mechanism of action
1	Oximes as antidote for Organophosphorus toxicity	
2	Adrenaline as a bronchial dilator	
3	Pronethalol as Hypotensive drug	
4	Theophylline as A diuretic	
5	Metoclopramide as Anti-emetics	
6	Verapamil as Antiarrhythmic	
7	Dicoumarol as Anticoagulant	
8	Thiazides as Diuretics	
9	Papaverine during Asthmatic attack	
10	Isoxurpine as Uterine sedatives	
	Tannic acid as intestinal astringents for treatment of diarrhoea	

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	Lille Barker	.*

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 	الأول	ا}ــادة :
	الثاني	الغرقة: القسم:
	الثالث	
	الرابع	

مجمسوع الدرجسات	

		الأول
		الثاني
gen and		الثالث
		الرابع
	1491-1	
		الخامس
	110 (400)	السادس ٠٠٠٠
		السابع
		الثامن
		التاسع
		الماشر ٠٠٠٠٠٠
		مجموعالدرجات

مجموع الدرجات (كتابة):

ملحوظة: على الطالب ان بكتب اجابته على الوجهين وان يجيب على الاسئلة المطلسوبة فقط ولن يلتفت الى الاجابات الزائدة عن المطلوب •

(من كل جامعة القاهرة للطباعة والنشر)

[8]

Cairo University
Faculty of Veterinary Medicine
Department of Pharmacology

Date: 4-1-2003 Course: 303 Time: Two hours⁽³⁾

General Pharmacology Examination For Undergraduate Students L Choose the correct enswer and fill in the spaces with switchle words.

1. This drug has selective ac mainly used as purgative, di	tion on the smooth m	uscles of the GIT and u			
a. Carbachol	b. Methacholine	c. Arecholine	d. Pilocarpine		
2. This drug inhibits the prestransmitter on neuron and al	so closes the chloride		d by GABA		
a. Picrotoxin	b. Barbiturates	c. Coramine	d. Cardiazol		
3. This is a pathway (for drug transport) of limited capacity across most barriers, e.g. the epithelial lining of the surface of the body such as the cornea, gut and bladder					
a. Aqueous diffusion b.Sin	nple diffusion c. Fa	cilitated diffusion	d. Active transport		
4. It is a powerful diaphoreti and in breaking down adhesi	on between iris and e	eye lens by alternate use	e it with atropine:		
a. Physostigmine b. Pilo	ocarpine c. Ar	echoline	d. Neostigmine		
5. The main site of action of these drugs is spinal cord where they block the action of inhibitory transmitter Glycine at postsynaptic neuron:					
a. Amphetamine b. Bru	cine c. Ep	phedrine	d. Strychnine		
6. (killing or inhibiting rumen ma. Turpentine oil b. Car	nicroflora, so it decrea	hich decrease bacterial ase the production of ga ethylsilicone	fermentation by as such as: d. Kerosene		
7. From the importance of bia. Decrease absorption fromc. Delay the drug excretion	the intestinal wall b	sma protein . Increase diffusion of t Increase the toxicity o	the drug into the cell f the drug.		
8. It is mainly used in treatment and used alternately with atroa. Pilocarpine b. Pros	opine to break down a	avis, glaucoma to reduce adhesions between the c. Eserine	e intraoccular pressure iris and the eye lens: d. Bethanechol		
9. Small dose from this drug act as nerve sedative and large doses acts as sedative hypnotic and general non-volatile anaesthetic (i.v. injection) in horse and donkeys:					
a. Potassium bromide	b. Chlorpromazine	c. Xylazine	d. Chloral hydrate		
10. (irritations are produced. The					
		c. Castor oil	d. Linseed oil		
11. Acetylation reaction carriand GIT for these drugs:	ied mainly in the live	r but also can be carried	l in the spleen, lung		
a. Progesterone	b. Meperidine	c. Sulphonamides	d. Pentobarbital		
1					

Des

[8]

II. Choose the correct answer and fill in the spaces with suitable words:

 Some drugs can their effect on the 	n react with metallic cell.	ions in the cell forming inactiv	e compounds and loses		
a. By osmosis	b. By replacement	c. By physical action	d. By chelation		
2. Autonomic dru a. Parasympathom	gs are classified accomimetics b.Choliner	ording to the autonomic receptorgic drugs c.Sympathomimet	ors into: ics d.Adrenergic drugs		
3. The action of the lead to increase of a. GABA	spinal reflexes and	nal interneuron is antagonized l tetanic contractions of skeletal c. Glutamic acid	by strychnine or brucine muscles: d. Aspartic acid		
peel and non-aron	Sial Is. It was called bitte natic such as:	lagogues) is commonly used to rs or stomachics and it may be	increase the annetite in		
a. Carbachol	b. Orange peel	c. Physostigmine	d. Nux vomica		
 5.(
	b. Furosemide	g.: c. Spironolactone	d. Acetazolamide		
8. () is effective drug in cases of expulsion of foetus in uterine inertia, retained placenta and uterine prolapse.					
9. Displacement of example, Warfarin a. Steroid anti-infla c. Hypoglycemic	toxicity are attribute	ing sites by a second drug is cli d to concurrently administratio b. Flunixin d. Muscle relaxan	on with:		
 From the advant Not suitable for it Rapid onset of dr 	tages of parenteral ac nsoluble substance rug action	dministration: b. Local irritation may occur d. Can be used when the anin	at the site of injection nal is unconscious		



Z

[3]

III. Choose the correct answer and fill in the spaces with suitable words:

1. These drugs preve organs and exocrine	nt the access of acetyl glands:	choline to the cholinergic rec	eptors of	internal
a. Parasympathomimc. Sympathomimetics		b. Parasympatholytd. Sympatholytics	ics	
GABA-activated chlo	oride channel remain o	by increase GABA binding to open (prolong the activity):	o its rece	ptors lead to
a. Ivermectin	b. Valporate sodium	c. Picrotoxin	d. Bar	biturate
3. (both the salivary and) is community bronchial secretions.	nonly used as preanasthetic n	nedication	n as it reduces
4. Is a sodium+ chanr a. Verapamil	nel blockers used to co b. Nefedipine	ontrol arrhythmia of ventricul c. Disopyramide	ar origin d. Bret	
mucous membrane so	stimulate reflexly the	They act by irritating the sense bronchial glands to secret m c. Ipecacuanha d. At	iore secre	tions such as
inhibiting Na ^T reabso	rption and K [—] excretion b. Amilaride	diuretics) act on distal tubules on and promote uric acid excr c. Bumetanide	etion e.g.	ecting tubules
7. (clinically used to synd) play chronize ovulation.	y a role in ovulation, luteolysi	is, uterine	motility and
which act peripherally	y such as:	f equine colic are non-steroid	l anti-infl	ammatory
a. Phenylbutazone	b. Methadone	c. fentanyl		d. Xylazine
9. This case occurs wl a. Chemical antagonis c. Competitive antago	sm	e with one another to form and b. Physiological antande. Noncompetitive a	agonism	•
10. Nicotinic action is a. Lobeline	blocked on the skelet b. Suxamethonium	tal muscle by: c. Small dose of acetylcho	oline	d. Gallamine
11. It is a powerful cer hyperacidity and impr	rebral stimulants, has oves digestion:	a direct stimulant to myocard	lium, prod	ducing
a. Caffeine	b. Theophylline	c. Theobromine	d. Amp	hetamine
12. (within the GIT and pro a. Potassium citrates b. Magnesium carbona	oduced their anti-acid	acids) are insoluble alkaline only in the stomach without b. Magnesiur d. Sodium cit	releasing n trisilica	CO ₂ such as:

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121

IV. Choose the correct answer and fill in the spaces with suitable words:

a. Dobutamine b. Gitoxin c. Strophanthus d. Squel 2. Drugs which liquefy bronchial vicid secretions by dissolving them, so reduce their visco to be easily expelled by coughing are called (Tomaculo power i	n acute heart failure (a	mest or	snock) e.g	f drugs increas	se heart rate and
a. Bromhexine b. Camphor c. Guaiacol d. Seneg 3. (a. Dobutamine	b. Gitoxin		c. Strophan		d. Squell
renal vasodilation and increase the glomerular filtrate with subsequent mild diuresis e.g. a. Chlorothiazide b. Lasix c. Triameterene d. caffeii 4. It act as counter irritants and during its excretion cause irritation and increase blood flow lead to sex organs so sexual activation (aphrodisiac) e.g. a. Yohimbine b. Alcohols c. Cantharidin d. Strychnine 5. The best drug used for regression of the follicular cyst in cows is: a. PGF _{2α} b. HCG c. Oestradiol benzoate d. F.S.H. 6. These cases occurs when an animal requires increasing doses to produce the same effect a. Cross-tolerance b. Selectivity c. Tolerance d. Specificity 7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease: a. Adrenaline b. Atropine c. Noradrenaline d. Acetylcholine 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (a by coughing are carr	cu (e their viscosity) such as: d. Senega
a. Yohimbine b. Alcohols c. Cantharidin d. Strychnine 5. The best drug used for regression of the follicular cyst in cows is: a. PGF _{2α} b. HCG c. Oestradiol benzoate d. F.S.H. 6. These cases occurs when an animal requires increasing doses to produce the same effect a. Cross-tolerance b. Selectivity c. Tolerance d. Specificity 7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease: a. Adrenaline b. Atropine c. Noradrenaline d. Acetylcholine 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (renal vasodilation a	nd increase the glomer	n at em	ooth muscle of trate with subse	renal blood ve	
5. The best drug used for regression of the follicular cyst in cows is: a. PGF _{2α} b. HCG c. Oestradiol benzoate d. F.S.H. 6. These cases occurs when an animal requires increasing doses to produce the same effect a. Cross-tolerance b. Selectivity c. Tolerance d. Specificity 7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease: a. Adrenaline b. Atropine c. Noradrenaline d. Acetylcholine 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (The second of Build St	o sexual activation (ap)	nroaisia	ac) e.g.		
a. PGF _{2α} b. HCG c. Oestradiol benzoate d. F.S.H. 6. These cases occurs when an animal requires increasing doses to produce the same effect a. Cross-tolerance b. Selectivity c. Tolerance d. Specificity 7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease: a. Adrenaline b. Atropine c. Noradrenaline d. Acetylcholine 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (rychnine
7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease: a. Adrenaline b. Atropine c. Noradrenaline d. Acetylcholine 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (5. The best drug use a. $PGF_{2\alpha}$	d for regression of the b. HCG	follicul c. Oe	ar cyst in cows		S.H.
a. Adrenaline b. Atropine c. Noradrenaline d. Acetylcholine 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (6. These cases occur a. Cross-tolerance	s when an animal requ b. Selectivity	ires inc	creasing doses to c. Tolerance	o produce the s d. Sp	same effect ecificity
8. This case occurs if a drug lacking an effect of its own increases the effect of a second, act drug (0 + 1 > 2). a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (7. It is unsuitable as vascular disease:	therapeutic agent, but	is some	times used for	treatment of pe	ripheral
a. Synergism b. Potentiation c. Antagonism d. Additive drug effects 9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (a. Adrenaline	b. Atropine		c. Noradrenal	line d. Ac	etylcholine
9. These are drugs considered a physiological mediator to acetylcholine, but are longer actin a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (f a drug lacking an effe	ect of its	s own increases	the effect of a	second, active
10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (a. Synergism	b. Potentiation	c. Ant	agonism	d. Additive d	rug effects
a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (9. These are drugs co a. Muscarine	nsidered a physiologic b. Carbachol	al medi c. Me	ator to acetylch	noline, but are d. Pilo	longer acting: ocarpine
11. (and the control of th	a improve respiration s	ana circ	alliation.	medulla as res	spiratory and
a. Morphine b. Copper sulphate c. Zinc sulphate d. Apomorphine F 12. It is the subject deals with absorption, distribution, biotransformation and excretion of drugs a. Pharmacodynamics b. The most commonly used emetic drug is d. Apomorphine F					=	
a Pharmacodynamics b. Therese is	a. Morphine	b. Copper sulphate	center.	c. Zinc sulpha	monly used em te d. Apo	netic drug is: omorphine Hcl
a Pharmacodynamics b Thomas is	12. It is the subject de drugs	als with absorption, di	stributi	on, biotransform	nation and exc	retion of
a. Fharmacodynamics b. Therapeutics c. Pharmacognosy d. Pharmacokinetic	a. Pharmacodynamics	b. Therapeutic	s	c. Pharmacogn	osy d. Phai	macokinetics

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V. Choose the correct answer and fill in the spaces with suitable words:

1. It decreases the sec administration of vol	cretion of all exocrine glan- atile anaesthesia:	ds and used as preanasthe	tic drug before
a. Adrenaline	b. Gallamine	c. Atropine	d. Hyoscine
of general anaesthesi	sed in veterinary medicine a a for surgical operations. It GABA-receptors on postsy	t act as depressant effect b	notic and for induction by increasing the
a. Bromides	b. Chloral hydrate	c. Barbiturates	d. Xylazine
3. (of the intestinal much a. Aluminum salts	osa to provide a protective b. Calcium carbonate	barrier for the underlaying	h precipitates protein g tissue such as: muth carbonate
4. Direct smooth mu	scle relaxants, elevate c-GN sypotensive drugs such as:	MP which relax smooth m	uscles of blood
a. Clonidine	b. α-methyldopa	c. Amyl nitrite	d. Reserpine
5. Cats are deficient salicylates such as	in special enzyme which m	netabolize drugs like parac	cetamol and the
a. Acyl transferase	b. glucuronyl transferase	c. Pseudocholinestrase	d. Sulphotransferase
6. It has the same action	tion of atropine but it produ to counteract gripping:	uce less cerebral stimulati	on and more
a. Hyoscyamine	b. Scopolamine	c. Hyoscine	d. Eucatropine
7. They are widely u	sed in horses and cattle as a sport, handling and contro	preanasthetic drug for rap l animals:	id induction of
a. Meprobamate	b. Xylazine	c. Chloral hydrate	d. Acepromazine
8. This rate is measurenal tubule.	ared by the clearance of inu	lin or creatinine and not r	eabsorbed from the
a. Tubular reabsorpt	ion b.Tubular secretion	c.Renal excretion d.Glo	merular filtration
9. This drug is used relaxes bronchial sm a. Isoproterenol	to treat bronchial asthma, s nooth muscle with little acc b. Epinephrine	electively, activates β ₂ -re companying undesirable companying undesirable companying	ardiac stimulation:
10. Injection of this defecation, decrease	drug s.c. in dog cause restle	essness, panting, salivatio hen deep narcoses:	n, vomiting,
a. Apomorphin	b. Nalorphine	c. Morphine	d. Acetyl morphine
11. (secrete more bile an a. Magnesium sulph	d are used to help digestion ate b. Cincophen	re drugs which stimulate n of fat in case of chronic c. Cholecystokinin	liver diseases such as:
.5			

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VI. Choose the cor 1. Internal haemorrha prothrombin and fact of thrombosis and blo	ge can be treated by or VII but ((.) for the form	nation of	
2. (the CNS causing neit a. Codeine phosphate	ther addiction nor na	rcosis, u	cause antitussive e sed for treatment of c. Pholcodeine	f dry cough s	depressing uch as: omethophan	
3. It is a derivative of also act as a tubular b				cid in the urin	ne, and it	
a. Sulphinpyrazone	b. Probencie	d	c. Indacrinone	d. Allop	urinol	
4. It used to stimulate and stimulate the synt						
a. L.H.	b. F.S.H.		c. Oestrogen	d. Prosta	aglandins	
5. () is the best dr	ug used f	or treatment of my	asthenia grav	is in dogs.	
6. When pKa of a dru	- -	ate of its i				
a. 15%	b. 50%		c. 75%	d. 100%	•	
7. It is a non catechol increases mental and				rful CNS stim	nulant, it	
a. Ephedrine	b. Mephenteramine	:	c. Amphetamine	d. Metar	raminol	
8. It has antipyretic ar sensitization to pain r	eceptors and not cau	se peptic	ulcer:			
a. Paracetamol	b. Phenazone	c. 50a	ium salicylates	d. Ibupre	oien	
9. It is alkaloid, produanaesthetic and aphro	disiac action:					
a. Tolazoline	b. Yohimbine	c. Aza	petine	d. Regiti	ine	
10 These drugs inhibi powerful inducer of p			ibit the synthesis o	of thromoxane	e, which is a	
a. Acetyl salicylic acid	d b. Warfarin	sodium	c. Heparin	d. Vitam	nin K	
11. Drugs that release tract infection such as				r treatment o	f urinary	
a. Formalin	b. Sodium citrate		c. Ammonium chi	loride d	l. Hexamine	
12. It depletes tissue synthesis of Norepinephrine through inhibition of the decarboxylation of dopa and also decreases the concentration of dopamine and Norepinephrine in the CNS and peripheral tissues:						
a. Reserpine	b. Bretylium	c. Gua	nethidine	d. Aldon	net	
13. Its solution is not and epidural anaesthe a. Amethocaine			adrenaline to prol		ion of action	
	z. diidiidania	2. 1.00		I wille	·	

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121

VII. Mention only the mechanism of action of the following drugs:

No.		Mechanism of action
1	Oximes as antidote for	
	Organophosphorus toxicity	
2	Adrenaline as	
	a bronchial dilator	
3	Pronethalol as	
	Hypotensive drug	
<u> </u>		
4	Theophylline as	
	A diuretic	
5	Metoclopramide as Anti-emetics	
1	Anti-emetics	
	:	
6	Verapamil as	
	Antiarrhythmic	
7	Dicoumarol as	
	Anticoagulant	
8	Thiazides as	
	Diuretics	
9	Papaverine during	
	Asthmatic attack	
10		
10	Isoxurpine as	
	Uterine sedatives	
11	Tannic acid as	
• •		
	intestinal astringents for	
	treatment of diarrhoea	

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المصحح	الدرجــة	السسؤال	
		الأول	المادة :
		الثاني	الفرقة:
		الثالث	,,
		المرابع	ent a college and
		الخامس	مجمـوع الدرجــات
		السادس ٠٠٠٠	
		السابع	
		الثامن	
		التاسع	
		العاشر	
		مجموعالدرجات	

ملحسوظة : على الطالب ان بكتب اجابته على الوجهين وان يجيب على الاسئلة المطلسوبة فقط وان يلتفت الى الاجابات الزائدة عن المطلوب .

(من كل جامعة القاهرة للطباعة والنشر)

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Cairo University Course: 303 Faculty of Veterinary Medicine Time: Two hours(4) Department of Pharmacology General Pharmacology Examination For Undergraduate Students I. Choose the correct answer and fill in the spaces with suitable words:), These group of drugs increase heart rate and contractile power in acute heart failure (arrest or shock) e.g. a. Dobutamine b. Gitoxin c. Strophanthus 2. Drugs which fiquefy bronchial vicid secretions by dissolving them, so reduce their viscosity to be easily expelled by coughing are called (.....) such as: c. Guaiacol d. Senega b. Camphor a. Bromhexine) They act extra-renal on the myocardium acting as a cardiac stimulant and cause relaxation of smooth muscle of renal blood vessels leading to renal vasodilation and increase the glomerular filtrate with subsequent mild diuresis e.g. b. Lasix c. Triameterene 4. It act as counter irritants and during its excretion cause irritation and increase blood flow lead to sex organs so sexual activation (aphrodisiac) e.g. b. Alcohols c. Cantharidin d. Strychnine 5. The best drug used for regression of the follicular cyst in cows is: d. F.S.H. c. Oestradiol benzoate a. PGF₂ b. HCG These cases occurs when an animal requires increasing doses to produce the same effect a. Cross-tolerance b. Selectivity c. Tolerance d. Specificity 7. It is unsuitable as therapeutic agent, but is sometimes used for treatment of peripheral vascular disease: d. Acetylcholine b. Atropine e. Noradrenaline a. Adrenaline 8. This case occurs if a drug lacking an effect of its own increases the effect of a second, active drug $(0+1 \ge 2)$. b. Potentiation c. Antagonism d. Additive drug effects a. Synergism These are drugs considered a physiological mediator to acetylcholine, but are longer acting: a. Muscarine b. Carbachol c. Mecholine d. Pilocarpine 10. These are drugs, which stimulate the depressed vital centers in medulla as respiratory and vasomotor centers and improve respiration and circulation: a. Amphetamine b. Nikethamide c. Theophylline d. Leptazol 11. (......) Drugs in this group stimulate the dopaminergic receptors in the CTZ, which, in turn stimulates the vomiting center. The most commonly used emetic drug is: d Apomorphine Hel c. Zinc sulphate a. Morphine b. Copper sulphate 12. It is the subject deals with absorption, distribution, biotransformation and excretion of e. Pharmacognosy d. Pharmacokinetics b. Therapeutics a. Pharmacodynamics

Date: 4-1-2003

II. Choose the correct answer and fill in the spaces with suitable words:

1. Some drugs ca their effect on the	in react with metallic	ions in the cell forming inact	ive compounds and loses
	b. By replacement	c. By physical action	d. By chelation
2. Autonomic dru a. Parasympathon	gs are classified accordinetics b.Choliner	rding to the autonomic receptor gic drugs c.Sympathomimetic	rs into: es d.Adrenergic drugs
3. The action of t lead to increase of a. GABA	his amino acid at spir f spinal reflexes and to b. Glycine	nal interneuron is antagonized etanic contractions of skeletal r c. Glutamic acid	by strychnine or brucine nuscles: d. Aspartic acid
4. (debilitating anima peel and non-aron	als. It was called bitte	agogues) is commonly used to rs or stomachics and it may be	increase the appetite in aromatic such as lemon
a. Carbachol	b. Orange peel	c. Physostigmine	d. Nux vomica
in which the heart	rate is slowed by vag	effect) is the gal stimulation and slowing the extended period of diastole.	e main effect of digitalis rate of conduction, these
6. (reaches to the tissu	anoxia) which ues. This happens in c	h is due to weak circulation of lease of shock, after haemorrhag	blood and so less oxygen e or in cardiac failure
7. It acts by compexcretion but caus a. Amphenone B	petitive antagonism we K ions retention e.g b. Furosemide	vith aldosterone hormone so it g.: c. Spironolactone	d. Acetazolamide
3. (uterine inertia, reta) is ained placenta and ute	is effective drug in cases of erine prolapse.	expulsion of foetus in
Displacement of example, Warfaring in Steroid anti-infle in Hypoglycemic	toxicity are attributed	ding sites by a second drug is d to concurrently administration b. Flunixin d. Muscle relaxants	n with:
From the advar Not suitable for Rapid onset of d	ntages of parenteral ad insoluble substance rug action	dministration: b. Local irritation may occur a d. Can be used when the anima	at the site of injection al is unconscious
₄ 4			
		2	

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III. Choose the correct answer and fill in the spaces with suitable words:

organs and exocrine glands: a. Parasympathomimetics b. Parasympatholytics c. Sympathomimetics c. Sympathomimetics c. Sympatholytics c. Sympatholitics c. Sympatholytics c. Sympatholitics c. Picrotoxin d. Barbiturate d. Barbiturate d. Barbiturate d. Barbiturate d. Sympatholitics c. Picrotoxin d. Barbiturate d. Sympatholitics c. Picrotox
GABA-activated chloride channel remain open (prolong the activity): a. Ivermectin b. Valporate sodium c. Picrotoxin d. Barbiturate 3. (
3. (
4. Is a sodium+ channel blockers used to control arrhythmia of ventricular origin e.g. a. Verapamil b. Nefedipine c. Disopyramide d. Bretylium 5. (
a. Verapamil b. Nefedipine c. Disopyramide d. Bretylium 5. (
mucous membrane so stimulate reflexly the bronchial glands to secret more secretions such as. a. Potassium iodide b. Tr. Benzoin c. Ipecacuanha d. Ammonium chloride 6. (
tubules inhibiting Na* reabsorption and K* excretion and promote uric acid excretion e.g. a. Furosemide b. Amilaride c. Bumetanide d. Ethacrynic acid 7. (
and clinically used to synchronize ovulation. 8. The ideal analgesic drugs for treatment of equine colic are non-steroid anti-inflammatory which act peripherally such as: a. Phenylbutazone b. Methadone c. fentanyl d. Xylazine 9. This case occurs when two drugs combine with one another to form an inactive compound. a. Chemical antagonism b. Physiological antagonism c. Competitive antagonism d. Noncompetitive antagonism 10. Negotinic action is blocked on the skeletal muscle by:
which act peripherally such as: a. Phenylbutazone b. Methadone c. fentanyl d. Xylazine 9. This case occurs when two drugs combine with one another to form an inactive compound. a. Chemical antagonism b. Physiological antagonism c. Competitive antagonism d. Noncompetitive antagonism 10. Necotinic action is blocked on the skeletal muscle by:
a. Phenylbutazone b. Methadone c. Ientanyi d. Xylazine 9. This case occurs when two drugs combine with one another to form an inactive compound. a. Chemical antagonism b. Physiological antagonism c. Competitive antagonism d. Noncompetitive antagonism 10. Negotinic action is blocked on the skeletal muscle by:
a. Chemical antagonism c. Competitive antagonism d. Noncompetitive antagonism 10. Neotinic action is blocked on the skeletal muscle by:
10. Neotinic action is blocked on the skeletal muscle by:
a. Lobeline b. Suxamethonium c. Small dose of acetylcholine d. Gallamine
11. It is a powerful cerebral stimulants, has a direct stimulant to myocardium, producing hyperacidity and improves digestion:
a. Caffeine b. Theophylline c. Theobromine d. Amphetamine
12. (

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IV. Choose the correct answer and fill in the spaces with suitable words:

1. This drug has sele mainly used as purgat			e GIT and urina	ry bladder; it is
a. Carbachol	b. Methacho		ne d. Pi	locarpine
2. This drug inhibitransmitter on neuron				ced by GABA
a. Picrotoxin	b. Barbitura			ardiazol
3. This is a pathway epithelial lining of the a. Aqueous diffusion	surface of the body	such as the cornea, g	ut and bladder	parriers, e.g. the
4. It is a powerful dia and in breaking down a. Physostigmine			ernate use it with	
5. The main site of actransmitter Glycine at		n:		-
a. Amphetamine	b. Brucine	c. Ephedrine	d. St	rychnine
6. (by killing or inhibiting a. Turpentine oil			duction of gas su	
7. From the important a. Decrease absorption c. Delay the drug exce	n from the intestinal	wall b. Increase diff	fusion of the dru toxicity of the dr	
8. It is mainly used in and used alternately v a. Pilocarpine			ween the iris and	
9. Small dose from the general non-volatile a a. Potassium bromide	naesthetic (i.v. <mark>injec</mark>	tion) in horse and dor	ikeys:	ve hypnotic and
10. (irritations are produce a. Phenolphthalein			e anthracene pur	
11. Acetylation reacti and GIT for these dru		the liver but also ca	n-be carried in	the spleen, lung
a. Progesterone	b. Meperidii	ne c. Sulphona	amjdes d.	Pentobarbital

Jan 1

V. Choose the correct answer and fill in the spaces with suitable words:

1. It decreases the secre administration of volatile	etion of all exocrine gleanaesthesia:		nasthetic drug before
a. Adrenaline	b. Gallamine	c. Atropine	d. Hyoscine
2. They are widely used it of general anaesthesia f binding of GABA to GAI	or surgical operations.	It act as depressant eff	notic and for induction fect by increasing the
a. Bromides	b. Chloral hydrate	c. Barbiturates	d. Xylazine
3. (o provide a protective be Calcium carbonate	arrier for the underlayin	ch precipitates protein g tissue such as: muth carbonate
4. Direct smooth muscl vessels and used as hypotensisting the second sec	e relaxants, elevate c-G	GMP which relax smoo	oth muscles of blood
a. Clonidine	b. α-methyldopa	c. Amyl nitrite	d. Reserpine
5. Cats are deficient in salicylates such as		metabolize drugs like	paracetamol and the
a. Acyl transferase b. g	lucuronyl transferase	c. Pseudocholinestrase	d. Sulphotransferase
6. It has the same actionantispasmodic action to co	counteract gripping:		stimulation and more
a. Hyoscyamine	b. Scopolamine	c. Hyoscine	d. Eucatropine
7. They are widely use anaesthesia, and transpor	d in horses and cattle t, handling and control a	as preanasthetic drug f mimals:	
a. Meprobamate	b. Xylazine	c. Chloral hydrate	d. Acepromazine
8. This rate is measured renal tubule.			
a. Tubular reabsorption	b. Tubular secretion c.	Renal excretion d.Glo	merular filtration
9. This drug is used to t relaxes bronchial smooth a. Isoproterenol	muscle with little accor	selectively, activates β ₂ : mpanying undesirable ca c. Norepinephrine	ardiac stimulation:
10. Injection of this defecation, decrease in b a. Apomorphin	lrug s.c. in dog cause ody temperature and the b. Nalorphine	restlessness, panting, in deep narcoses: c. Morphine	salivation, vomiting, d. Acetyl morphine
11. (secrete more bile and arca. Magnesium sulphate	used to help digestion o b. Cincophen	of fat in case of chronic	ulate the liver cells to liver diseases such as: d. Sodium sulphate

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VI. Choose the core 1. Internal haemorrha prothrombin and facto of thrombosis and bloo	ge can be treated by or VII but ((for the formation of		
2. (the CNS causing neithal. Codeine phosphate	her addiction nor narce	osis, us	ed for treatment of dry	et without depressing / cough such as: d. Dextromethophan		
3. It is a derivative of also act as a tubular bla. Sulphinpyrazone	benzoic acid, which locking agent for penic b. Probencid	increase cillin e.g	e excretion of uric act 3. c. Indacrinone	d. Allopurinol		
4. It used to stimulate and stimulate the synt	addition of follicle g	rowth, s	timulate supperovulat	ion, embryo transfere		
a. L.H.	b. F.S.H.		c. Oestrogen	d. Prostaglandins		
5. () is the best dru	ig used f	for treatment of myast	henia gravis in dogs.		
6. When pKa of a druga. 15%	g equal the pH the rate b. 50%	e of its ic	onization reach: c. 75%	d. 100%		
7. It is a non catecholamine, rapidly absorbed from the GIT and powerful CNS stimulant, it increases mental and physical activities and decrease fatigue:						
a. Ephedrine	b. Mephenteramine		c. Amphetamine	d. Metaraminol		
sensitization to pain re	and analgesic effect by eceptors and not cause	e peptic	ulcer:			
a. Paracetamol	b. Pnenazone	c. Soqi	um salicylates	d. Ibuprofen		
9. It is alkaloid, pro anaesthetic and aphro		∞_2 -adre	energic block, antidit	iretic action, marked		
a. Tolazoline	b. Yohimbine	c. Azaj	petine	d. Regitine		
	t evelooxygenase and latelet aggregation e.g		aibit the synthesis of th	romoxane, which is a		
a. Acetyl salicylic acid	d b. Warfarin so	odium	c. Heparin	d. Vitamin K		
11. Drugs that release tract infection such as	c an antiseptic substanting pylonepheritis, cys	nce in a	cid urine are used for I urithritis e.g.	r treatment of urinary		
a. Formalin	b. Sodium citrate		c. Ammonium chlori	de d. Hexamine		
dopa and also decrea	synthesis of Norepine ses the concentration	phrine t of dopa	hrough inhibition of tamine and Norepinep	he decarboxylation of hrine in the CNS and		
peripheral tissues: a. Reserpine	b. Bretylium	c. Gua	nethidine	d. Aldomet		
13. Its solution is not and epidural anaesthe a. Amethocaine	absorbed from muco sia and usually combi b. Cinchocaine	ous mem ned with c. Proc	n adrenaline to prolong	uitable for infiltration g its duration of action d. Paintocain		

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VII. Mention only the mechanism of action of the following drugs:

No.	Drugs	Mechanism of action
1	Oximes as antidote for Organophosphorus toxicity	
2	Adrenaline as a bronchial dilator	
3	Pronethalol as Hypotensive drug	
4	Theophylline as A diuretic	
5	Metoclopramide as Anti-emetics	
6	Verapamil as Antiarrhythmic	
7	Dicoumarol as Anticoagulant	
8	Thiazides as Diuretics	
9	Papaverine during Asthmatic attack	
10	Isoxurpian as Uterine sedatives	
11	Tannic acid as intestinal astringents for treatment of diarrhoea	

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17 May 16 years 1
JULY P. J.

سنة		امتحان دور:
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••••••	القسم :		الفرقة:

	مجهسوع الدرجسات	
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المسحح	الدرجة	الســؤال
		الأول
		الثاني
		الثالث
1		
***		المرابع
	***	الخامس ٢٠٠٠٠
		السادس ٠٠٠٠
		السابع
		الدامن
		التاسع
		الماشر
		سجبوع الحرجات

مجموع الدرجات (كتابة) :

ملحسوظة : على الطالب أن يكتب أجابته على الوجهين وأن يجيب على الاسئلة المطلسوبة فقط ولن يلتفت ألى الاجابات الزائدة عن المطلوب «

(مركز جامعة القاهرة للطباعة والنشر)

Cairo University

Faculty of Veterinary Medicine

Department of Pharmacology

General Pharmacology Examination For Undergraduate Students

Date: 4-1-2003 Time: Two hours⁽⁵⁾

1. It decreases the secretion of all exocrine glands and used as preanasthetic drug before					
administration of volatile as	naesthesia:				
a. Adrenaline	b. Gallamine	c. Atropine	d. Hyoscine		
2. They are widely used in of general anaesthesia for binding of GABA to GABA a. Bromides	surgical operations.	It act as depressant e ptic membrane:	onotic and for induction ffect by increasing the d. Xylazine		
3. (protein of the intestinal mu a. Aluminum salts b. Ca	cosa to provide a protec	ctive barrier for the unc	lerlaying tissue such as:		
4. Direct smooth muscle re and used as hypotensive dru	elaxants, elevate c-GMF ugs such as:	which relax smooth n	nuscles of blood vessels		
a. Clonidine	b. α-methyldopa	c. Amyl nitrite	d. Reserpine		
5. Cats are deficient in salicylates such as					
a. Acyl transferase b. gluc	curonyl transferase c.	Pseudocholinestrase	d. Sulphotransferase		
6. It has the same actio antispasmodic action to con	n of atropine but it punteract gripping:	produce less cerebral	stimulation and more		
a. Hyoscyamine	b. Scopolamine	c. Hyoscine	d. Eucatropine		
7. They are widely used anaesthesia, and transport,	in horses and cattle handling and control ar	as preanasthetic drug	for rapid induction of		
a. Meprobamate	b. Xylazine	c. Chloral hydrate	d. Acepromazine		
8. This rate is measured by tubule.	the clearance of inulin	or creatinine and not re	eabsorbed from the renal		
a. Tubular reabsorption b	.Tubular secretion c.R	Lenal excretion d.Glo	merular filtration		
9. This drug is used to trelaxes bronchial smooth n	nuscle with little accom	selectively, activates fapanying undesirable ca c. Norepinephrine	ardiac stimulation:		
a. Isoproterenol					
10. Injection of this drug s decrease in body temperatu	are and then deep narco	ses:			
a. Apomorphin	b. Nalorphine	c. Morphine	d. Acetyl morphine		
11. (secrete more bile and are u a. Magnesium sulphate	ised to help digestion of	f fat in case of chronic	liver diseases such as:		

II. Choose the correct answer and fill in the spaces with suitable words:

1. Some drugs car their effect on the		ns in the cell forming inacti	ve compounds and loses
a. By osmosis	b. By replacement	c. By physical action	d. By chelation
2. Autonomic dru a. Parasympathon	gs are classified accord nimetics b.Cholinerg	ding to the autonomic recept ic drugs c.Sympathomime	tors into: tics d.Adrenergic drugs
lead to increase of	f spinal reflexes and te	l interneuron is antagonized tanic contractions of skeleta	il muscles:
a. GABA	b. Glycine	c. Glutamic acid	d. Aspartic acid
appetite in debilit	ating animals. It was call non-aromatic such as	Sialagogues) is commonalled bitters or stomachics a	nly used to increase the nd it may be aromatic such
a. Carbachol	b. Orange peel	c. Physostigmine	d. Nux vomica
which the heart ra	ite is slowed by vagal s	effect) is the man stimulation and slowing the extended period of diastole.	rate of conduction, these
6. (reaches to the tiss	anoxia) which is a ues. This happens in ca	due to weak circulation of base of shock, after haemorrh	lood and so less oxygen nage or in cardiac failure
7. It acts by comp	etitive antagonism wit se K_ions retention e.s	h aldosterone hormone so it	cause increase Na ⁺ ions
a. Amphenone B	b. Furosemide	c. Spironolactone	d. Acetazolamide
8. (uterine inertia, re	tained placenta and ute) is effective drug in cases erine prolapse.	s of expulsion of foetus in
9. Displacement of example, Warfari a. Steroid anti-inf c. Hypoglycemic	n toxicity are attribute	ing sites by a second drug is d to concurrently administra b. Flunixin d. Muscle relax	ation with:
10. From the advaa. Not suitable foc. Rapid onset of		dministration: b. Local irritation may occ d. Can be used when the a	cur at the site of injection nimal is unconscious

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III. Choose the correct answer and fill in the spaces with suitable words:

1. These drugs preven organs and exocrine g		choline to the cholinergic re	eceptors of internal		
a. Parasympathomimec. Sympathomimetics	etics		b. Parasympatholyticsd. Sympatholytics		
GABA-activated chlo	ride channel remain o	by increase GABA binding pen (prolong the activity):	•		
a. Ivermectin	b. Valporate sodium	c. Picrotoxin	d. Barbiturate		
3. (reduces both the saliv) is c ary and bronchial secr	ommonly used as preanast retions.	hetic medication as it		
		ntrol arrhythmia of ventrice c. Disopyramide			
mucous membrane so	stimulate reflexly the	They act by irritating the sebronchial glands to secret c. Ipecacuanha d. A	more secretions such as:		
tubules inhibiting Na	reabsorption and K	diuretics) act on distal tubu excretion and promote uric c. Bumetanide	acid excretion e.g.		
7. (and clinically used to) play a role in ovulation, lu ı.	uteolysis, uterine motility		
8. The ideal analgesic which act peripherally		f equine colic are non-stero	-		
a. Phenylbutazone	b. Methadone	c. fentanyl	d. Xylazine		
9. This case occurs what a. Chemical antagonistsc. Competitive antagonists	sm	e with one another to form b. Physiological and d. Noncompetitive	ntagonism		
10. Nicotinic action isa. Lobeline		tal muscle by: c. Small dose of acetyle	holine d. Gallamine		
11. It is a powerful ce hyperacidity and impra. Caffeine	oves digestion:	a direct stimulant to myoca	ardium, producing d. Amphetamine		
	oduced their anti-acid	acids) are insoluble alkalir only in the stomach without b. Magnesi d. Sodium	ut releasing CO ₂ such as: ium trisilicate		

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IV. Choose the correct answer and fill in the spaces with suitable words:

1. (), These group of drugs increase heart rate and contractile power in acute heart failure (arrest or shock) e.g.						
a. Dobutamine	b. Gitoxin	c. Strophanth		d. Squell		
2. Drugs which lique to be easily expelled a. Bromhexine	fy bronchial vicid secr by coughing are called b. Camphor	etions by dissolving th	em, so reduce th	neir viscosity .) such as: d. Senega		
cardiac stimulant and	l cause relaxation of sr	ey act extra-renal on the mooth muscle of renal trate with subsequent in c. Triametere	blood vessels le nild diuresis e.g	ading to renal		
4. It act as counter irr lead to sex organs so a. Yohimbine	itants and during its ex sexual activation (aph b. Alcohols	scretion cause irritation rodisiac) e.g. c. Cantharidin	n and increase b			
5. The best drug used a. $PGF_{2\alpha}$	for regression of the f b. HCG	ollicular cyst in cows i c. Oestradiol benzoat		·I.		
6. These cases occurs a. Cross-tolerance	when an animal requi b. Selectivity	res increasing doses to c. Tolerance	produce the sai d. Spec			
7. It is unsuitable as the vascular disease:	herapeutic agent, but is	s sometimes used for the	reatment of peri	pheral		
a. Adrenaline	b. Atropine	c. Noradrenal	ine d. Acet	ylcholine		
8. This case occurs if drug $(0 + 1 > 2)$.	a drug lacking an effec	ct of its own increases	the effect of a se	econd, active		
a. Synergism	b. Potentiation	c. Antagonism	d. Additive dru	g effects		
9. These are drugs con a. Muscarine	nsidered a physiologica b. Carbachol	al mediator to acetylch c. Mecholine	oline, but are lo d. Piloc			
10. These are drugs, v	which stimulate the dep d improve respiration a	oressed vital centers in and circulation:	medulla as resp	iratory and		
		c. Theophylline	d. Lepta	azol		
CTZ, which, in turn st) Drugs in this timulates the vomiting b. Copper sulphate	group stimulate the do center. The most com- c. Zinc sulpha	monly used eme	eptors in the etic drug is: norphine Hcl		
12. It is the subject de drugs	als with absorption, di	stribution, biotransforr	nation and excre	etion of		
a. Pharmacodynamics	b. Therapeutic	s c. Pharmacogr	osy d. Pharr	nacokinetics		

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V. Choose the correct answer and fill in the spaces with suitable words:

1. This drug has selective a mainly used as purgative, o	ection on the smo	ooth musc nal tonic:	les of the GIT a		
a. Carbachol	b. Methachol	ine (c. Arecholine	d. Pilocarpir	ne
2. This drug inhibits the pr transmitter on neuron and	esynaptic and po	stsynaption	inhibition prod	luced by GABA n:	
a. Picrotoxin	b. Barbiturate	es (c. Coramine	d. Cardiazol	
3. This is a pathway (for cepithelial lining of the surf	lrug transport) o	f limited	capacity across i	most barriers, e.g. 1 d bladder	the
a. Aqueous diffusion b.S	Simple diffusion	c. Facil	itated diffusion	d. Active tra	ınsport
4. It is a powerful diaphore and in breaking down adh	esion between in	ove oedem is and eye c. Arec	lens by alternat	for treatment of glue use it with atropi d. Neostigm	ine:
a. I my booking.	ilocarpine			J	
5. The main site of action transmitter Glycine at pos	of these drugs is tsynaptic neuron	spinal co	rd where they bl		
a. Amphetamine b. E	Brucine	c. Ephe	drine	d. Strychnir	ie
6. (by killing or inhibiting rui	nen microflora,	so it decre	ease the product	ion of gas such as.	
a. Turpentine oil b. C	Carbachol	c. Meth	ylsilicone	d. Kerosene	;
7. From the importance of a. Decrease absorption from the drug excretion in the drug exc	om the intestinal	wall b. I	na protein ncrease diffusion ncrease the toxic	n of the drug into the city of the drug.	the cell
8. It is mainly used in trea and used alternately with a. Pilocarpine b. I	atment of myasth atropine to break Prostigmine	enia gravi c down ad	is, glaucoma to a hesions between c. Eserine	reduce intraoccular n the iris and the ey d. Bethaneo	ye iens:
O Small dose from this d	rug act as nerve s	sedative a	nd large doses a	cts as sedative hyp	notic and
general non-volatile anae	sthetic (i.v. injec b. Chlorpro	tion) in h	orse and donkey c. Xylazine	s: d. Chloral 1	
a. Potassium bromide	•		•		
10. (irritations are produced. 'a. Phenolphthalein	Γhe main membe b. Senna) are	e agents, which a group are the an c. Castor oil	require metabolisn thracene purgative d. Linseed	s as:
11. Acetylation reaction	carried mainly in	the liver	but also can be	carried in the splee	en, lung
and GIT for these drugs:a. Progesterone	b. Meperidi	ne	c. Sulphonami	des d. Pentoba	rbital

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	correct answer and orrhage can be treated I factor VII but (
a. Codeine phosph	neither addiction nor in the balance b. Dihydrocode	inone	c. Pholcodeine	of dry cough so d. Dextro	uch as: omethophan	
 It is a derivative also act as a tubula Sulphinpyrazon 	3. It is a derivative of benzoic acid, which increase excretion of uric acid in the urine, and it also act as a tubular blocking agent for penicillin e.g.					
			c. Indacrinone	d. Allopi		
	ate addition of follicle synthesis of androgen of	growth,	stimulate supperovu	lation, embry	o transfere	
a. L.H.	b. F S.H.		c. Oestrogen	d. Prosta		
) is the best			yasthenia grav	is in dogs.	
6. When pKa of a c	drug equal the pH the t	ate of its	ionization reach			
a. 15%	b. 50%		c. 75%	d. 100%		
	olamine, rapidly absorbed physical activities a	bed from	the GIT and power	ful CNS stimu	lant, it	
a. Ephedrine	b. Mephenteramine	;	c. Amphetamine	d. Metara	minol	
8. It has antipyretic sensitization to pair a. Paracetamol	and analgesic effect b	se peptic	uicer:	g center and de	ecrease	
	b. Phenazone		ium salicylates	d. Ibuprof		
		2 -adrener	gic block, antidiure	tic action, mar	ked	
a. Tolazoline	o. Tommonic	c. Azaj		d. Regitine		
	oit cyclooxygenase and platelet aggregation e.		ibit the synthesis of	thromoxane, v	which is a	
a. Acetyl salicylic ac	eid b. Warfarin s	odium	c. Heparin	d. Vitamin		
	e an antiseptic substants in pylonepheritis, cy	ice in acid	l urine are used for a	treatment of u	rinary	
a. Formalin	b. Sodium citrate		c. Ammonium chlor	ride d. H	lexamine	
12. It depletes tissue dopa and also decrea peripheral tissues:	synthesis of Norepine ses the concentration of	phrine throf dopami	ough inhibition of the nearly of the nearly one of the nearly or the nearly of the nea	he decarboxylarine in the CN	ation of S and	
a. Reserpine	b. Bretylium	c. Guan	ethidine	d. Aldomet		
13. Its solution is not and epidural anaesthe a. Amethocaine	absorbed from mucou esia and usually combi b. Cinchocaine	s membra ned with c. Proca	adrenaline to prolon	itable for infiling its duration d. Paintocai	of action	

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VII. Mention only the mechanism of action of the following drugs:

No.	Drugs	Mechanism of action
1	Oximes as antidote for	
	Organophosphorus toxicity	
2	Adrenaline as	
	a bronchial dilator	
3	Pronethalol as	
	Hypotensive drug	
4	Theophylline as	
•	A diuretic	
5	Metoclopramide as	
	Anti-emetics	
6	Verapamil as Antiarrhythmic	
	Antiarrnythmic	
7	Dicoumarol as	
	Anticoagulant	
	•	
8	Thiazides as	
	Diuretics	
	;	
9	Papaverine during	
9	Asthmatic attack	
	Astimatic attack	
10	Isoxurpine as	
1	Uterine sedatives	
	Old me sedan ves	
11	Tannic acid as	
	intestinal astringents for	
	treatment of diarrhoea	
L	dedition of diameter	

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